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NEW ENGAGEMENT DATA FOR THE BREAKPOINTS DATA BASE

Richard C. Anderson

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30 September 1988

Prepared for

U.S. Army Concepts Analysis Agency
8120 Woodmont Avenue
Bethesda, Maryland 20814-2797

As Part of the Study
Forced Changes of Combat Posture

Under

Contract No. MDA903-87-C-0807

**Historical Evaluation and Research Organization**
*A Division of*

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## Introduction

As part of the study Forced Changes of Combat Posture, prepared for the
U.S. Army Concepts Analysis Agency (CAA) under Contract No. MDA903-87-C-0807,
detailed research was carried out in official US and German records on ten
operations in which it was believed that forced changes in combat posture had
occurred. The purpose of this research was to augment the data base estab-
lished for this study (the Breakpoints Data Base) with additional examples of
forced posture change, and especially to provide engagements involving units
smaller than divisions. The ten operations yielded 24 discrete engagements
that ended in forced posture changes, 16 of them at regimental level and the
remaining 5 at divisional level.

The data for the 24 newly researched engagements have been entered in
DMSi's Land Warfare Data Base (LWDB). The core of this data base is Analysis
of Factors That Have Influenced Outcomes of Battles and Wars: A Data Base of
Battles and Engagements, prepared in 1983 by DMSi's predecessor organization
for CAA under CAA Contract No. MDA903-82-C-0363; the LWDB has since been aug-
mented and revised by additional research. The Breakpoints Data Base and the
research for the new engagements are fully discussed in Section II of the
final report on Forced Changes of Combat Posture.

The present report, which is a supplement to the report Forced Changes
of Combat Posture, contains the following material:

- data, in LWDB format, for the 24 newly researched engagements;

- brief narratives for each of the engagements, so arranged that
data on each engagement are followed by the narrative for that engagement;

- a list of sources for the data.

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Engagement #:    R 16*    Battle: Sidi Bou Zid I

War: World War II
Location: Tunisia
Century: 20
Year: 1943
Start Date:    2/14/43
End Date:      2/14/43

Campaign: Northwest Africa

Attacker: Ger Elms 10th and 21st PD
Defender: US CCA, 1st Arm Div (+)
Attacker Commander: Gen Ziegler
Defender Commander: BG McQuillion

Duration:      1 days
Width of Front:    22 km

Defender Posture: HD
Terrain: FB/RgB
Weather: DSC
Season:  WD
Air Superiority?: A
Surprise?: Y
Surpriser?: A
Level of Surprise: Substantial

| | | | |
|---|---|---|---|
| Atkr Total Strength: | 6400 | Atkr Total Losses: | 20 |
| Def Total Strength: | 5333 | Def Total Losses: | 920 |
| A/D Total Strength Ratio: | 1.20 | A/D Total Loss Ratio: | 0.02 |
| | | | |
| Atkr Total Armor: | 135 | Atkr % per Day Losses: | 0.31 |
| Def Total Armor: | 69 | Def % per Day Losses: | 17.2 |
| A/D Total Armor Ratio: | 1.96 | | |
| | | | |
| Atkr Light Armor: | | Atkr Armor Losses: | 0 |
| Atkr MBTs: | 135 | Def Armor Losses: | 48 |
| Def Light Armor: | 16 | Atkr % per Day Armor Loss: | 0 |
| Def MBTs: | 53 | Def % per Day Armor Loss: | 69.6 |
| | | | |
| Atkr Arty Pcs: | 35 | Atkr Arty Pcs Lost: | 0 |
| Def Arty Pcs: | 47 | Def Arty Pcs Lost: | 35 |
| A/D Total Arty Ratio: | 0.74 | Atkr % per Day Arty Loss: | 0 |
| | | Def % per Day Arty Loss: | 74.5 |
| | | | |
| Atkr Air Sorties: | 180 | Atkr Air Losses: | |
| Def Air Sorties: | 0 | Def Air Losses: | |
| A/D Total Sorties Ratio: | 0.00 | Atkr % of Sorties per Day: | |
| | | Def % of Sorties per Day: | |
| | | | |
| Atkr Total Cavalry: | | | |
| Def Total Cavalry: | | | |
| A/D Total Cavalry Ratio: | 0.00 | | |

* Engagement numbers reflect the ordering of the engagements for model para-
meter computation.  Engagements are presented here in chronological order.
Numbers preceded by R indicate a regimental engagement; numbers preceded by D
indicate a divisional engagement.

Reference #:   R16   Battle:Sidi Bou Zid I

```
                                     A/D
Combat Effectiveness Favored: x/-
Leadership Favored:            -/o
Training & Experience Favored:-/o
Morale Favored:               C                    C: Comparable for both
Logistics Capability:         C                       sides
Momentum Favored:             x/-
Intelligence Favored          -/x                  N: Not a factor for
Technology Favored:           C                       either side
Initiative Favored:           x/-
Force Quality Favored:        x/-                  x: Advantage
Reserves Favored:             -/o
Mobility Superiority Favored: x/-                  o: Disadvantage
Air Superiority Favored:      X/-
Force Preponderance Favored:  x/-                  X: Decisive Advantage
Weather Favored:              N
Terrain Favored:              -/x                  O: Decisive Disadvantage
Leadership Favored:           C
Planning Favored:             X/-                  -: Not a factor for the
Surprise Favored:             x/-                     indicated side
Maneuver Favored:             X/-
Logistics Favored:            N
Fortifications Favored:       N
Depth Favored:                -/o

Atkr Main Attack Type:        EE
Atkr Secondary AttackType:    -
Def Scheme of Defense:        D/O, F

Attacker Resolution:          P
Defender Resolution: _        R, WDL

Attacker Mission Accomplish-
ment Score:                             8
Defender Mission Accomplish-
ment Score:                             3

Distance Advanced:              16 km/day  (+ = Attacker; - = Defender)

Who Won:                        A          (A = Attacker; D = Defender)
```

**Sidi Bou Zid I, 14 February 1943 (R)***

CCA, 1st Armored Division, with the attached 168th RCT (-), was given the mission of defending the Eastern Dorsal mountain passes in Tunisia. The positions chosen were widely separated and not mutually supporting. Before first light on 14 February elements of the 10th and 21st Panzer Divisions attacked to envelop these positions and destroy CCA. Moving swiftly, the German forces overran the outposts of CCA, and isolated the 168th RCT. The main body of CCA counterattacked against superior German forces, was out-flanked, and was forced to withdraw with heavy losses.

**Significance.** RCT 168 was isolated. CCA was rendered combat ineffective and was unable to support the counterattack to relieve RCT 168 on the following day.

---

* R following an engagement name indicates a regimental-level engagement; D indicates a divisional-level engagement.

```
Engagement #:      R1      Battle: Sidi Bou Zid II

War: World War II
Location: Tunisia
Century: 20
Year: 1943
Start Date:     2/15/43
End Date:       2/15/43

Campaign: Northwest Africa

Attacker: US CCC, 1st Arm Div
Defender: Ger Elms 10th and 21st PD
Attacker Commander: Col Stack
Defender Commander: Gen Ziegler

Duration:       1 days
Width of Front:     4 km

Defender Posture: HD
Terrain: FB/RgB
Weather: DOC
Season:  WD
Air Superiority?: D
Surprise?: N
Surpriser?: -
Level of Surprise: -

Atkr Total Strength:        2738     Atkr Total Losses:              367
Def Total Strength:         8380     Def Total Losses:                50
A/D Total Strength Ratio:   0.33     A/D Total Loss Ratio:          7.34

Atkr Total Armor:             66     Atkr % per Day Losses:         13.4
Def Total Armor:             135     Def % per Day Losses:           0.6
A/D Total Armor Ratio:      0.49

Atkr Light Armor:                    Atkr Armor Losses:               48
Atkr MBTs:                    66     Def Armor Losses:                10
Def Light Armor:                     Atkr % per Day Armor Loss:     72.7
Def MBTs:                    135     Def % per Day Armor Loss:       7.4

Atkr Arty Pcs:                26     Atkr Arty Pcs Lost:               4
Def Arty Pcs:                 35     Def Arty Pcs Lost:                0
A/D Total Arty Ratio:       0.74     Atkr % per Day Arty Loss:      15.4
                                     Def % per Day Arty Loss:          0

Atkr Air Sorties:              0     Atkr Air Losses:
Def Air Sorties:             125     Def Air Losses:
A/D Total Sorties Ratio:    0.00     Atkr % of Sorties per Day:
                                     Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:    0.00
```

Reference #:    R1    Battle:Sidi Bou Zid II

```
                                  A/D
Combat Effectiveness Favored:  o/-
Leadership Favored:            o/-
Training & Experience Favored:o/-
Morale Favored:                C              C: Comparable for both
Logistics Capability:          C                 sides
Momentum Favored:              -/x
Intelligence Favored           o/-           N: Not a factor for
Technology Favored:            C                 either side
Initiative Favored:            -/x
Force Quality Favored:         -/x           x: Advantage
Reserves Favored:              o/-
Mobility Superiority Favored:  C             o: Disadvantage
Air Superiority Favored:       -/x
Force Preponderance Favored:   -/x           X: Decisive Advantage
Weather Favored:               N
Terrain Favored:               -/x           O: Decisive Disadvantage
Leadership Favored:            C
Planning Favored:              o/-           -: Not a factor for the
Surprise Favored:              N                 indicated side
Maneuver Favored:              -/x
Logistics Favored:             N
Fortifications Favored:        N
Depth Favored:                 -/x

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     -
Def Scheme of Defense:         D/O, EE

Attacker Resolution:           P, R, WDL
Defender Resolution:           P

Attacker Mission Accomplish-
ment Score:                             2
Defender Mission Accomplish-
ment Score:                             9

Distance Advanced:             0 km/day  (+ = Attacker; - = Defender)

Who Won:                       D         (A = Attacker; D = Defender)
```

**Sidi Bou Zid II, 15 February 1943 (R)**

CCC, 1st Armored Division, was to attack from the northwest to clear an escape route for RCT 168(-), trapped by the German attack of the previous day. The attack was to be made by the armored elements of CCC, supported by artillery and with tank destroyers on its flanks. Initial resistance was minimal, consisting mainly of effective harassing attacks by German dive bombers on the supporting US artillery. By late afternoon advanced US armored units had penetrated to Sidi Bou Zid. There the US forces were trapped in a well-planned German antiarmor ambush. German tanks then counterattacked, threatening both flanks of CCC, which subsequently withdrew to the west with heavy loss.

**Significance.** Half the armored strength of the 1st Armored Division had been rendered combat ineffective in two days of combat. The isolated RCT 168(-) attempted to break out on the night of 16-17 February, but most of its men were captured.

Engagement #:    R 17     Battle· Kasserine Pass

War: World War II
Location: Tunisia
Century: 20
Year: 1943
Start Date:    2/19/43
End Date:      2/20/43

Campaign: Northwest Africa

Attacker: Ger Afrika Korps (-)
Defender: US 26th RCT (-)(+)
Attacker Commander: FM Rommel
Defender Commander: Col Stark

Duration:     2 days
Width of Front:     4 km

Defender Posture: HD
Terrain: RgB
Weather: WHC
Season:  WD
Air Superiority?: A
Surprise?: N
Surpriser?: -
Level of Surprise: -

| | | | |
|---|---|---|---|
| Atkr Total Strength: | 7000 | Atkr Total Losses: | 200 |
| Def Total Strength: | 5303 | Def Total Losses: | 527 |
| A/D Total Strength Ratio: | 1.32 | A/D Total Loss Ratio: | 0.38 |
| | | | |
| Atkr Total Armor: | 54 | Atkr % per Day Losses: | 1.4 |
| Def Total Armor: | 13 | Def % per Day Losses: | 5 |
| A/D Total Armor Ratio: | 4.15 | | |
| | | | |
| Atkr Light Armor: | 24 | Atkr Armor Losses: | 2 |
| Atkr MBTs: | 30 | Def Armor Losses: | 4 |
| Def Light Armor: | 0 | Atkr % per Day Armor Loss: | 1.8 |
| Def MBTs: | 13 | Def % per Day Armor Loss: | 15.4 |
| | | | |
| Atkr Arty Pcs: | 46 | Atkr Arty Pcs Lost: | |
| Def Arty Pcs: | 30 | Def Arty Pcs Lost: | 8 |
| A/D Total Arty Ratio: | 1.53 | Atkr % per Day Arty Loss: | |
| | | Def % per Day Arty Loss: | 13.3 |
| | | | |
| Atkr Air Sorties: | 0 | Atkr Air Losses: | |
| Def Air Sorties: | 0 | Def Air Losses: | |
| A/D Total Sorties Ratio: | 0.00 | Atkr % of Sorties per Day: | |
| | | Def % of Sorties per Day: | |
| | | | |
| Atkr Total Cavalry: | | | |
| Def Total Cavalry: | | | |
| A/D Total Cavalry Ratio: | 0.00 | | |

Reference #:   R 17   Battle:Kasserine Pass

```
                                   A/D
Combat Effectiveness Favored:  x/-
Leadership Favored:            x/-
Training & Experience Favored: x/-
Morale Favored:                -/o          C:  Comparable for both
Logistics Capability:          C                sides
Momentum Favored:              x/-
Intelligence Favored           -/o          N:  Not a factor for
Technology Favored:            C                either side
Initiative Favored:            x/-
Force Quality Favored:         -/O          x:  Advantage
Reserves Favored:              -/o
Mobility Superiority Favored:  x/-          o:  Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   N            X:  Decisive Advantage
Weather Favored:               N
Terrain Favored:               -/x          O:  Decisive Disadvantage
Leadership Favored:            x/-
Planning Favored:              -/O          -:  Not a factor for the
Surprise Favored:              N                indicated side
Maneuver Favored:              x/-
Logistics Favored:             N
Fortifications Favored:        -/x
Depth Favored:                 -/o

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     EE
Def Scheme of Defense:         D

Attacker Resolution:           R, P, Ps
Defender Resolution:           WD
```

Attacker Mission Accomplish-
ment Score                              7
Defender Mission Accomplish-
ment Score:                             3

Distance Advanced:          3 km/day  (+ = Attacker; - = Defender)

Who Won:                    A         (A = Attacker; D = Defender)

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**Kasserine Pass, 19-20 February 1943 (R)**

Allied forces were attempting to develop new positions to protect the logistical installations exposed by the collapse of the southern flank of II Corps in the battles of Sidi Bou Zid. Task Force Stark, 1st US Infantry Division, was to defend positions on the high ground flanking Kasserine Pass with tanks and tank destroyers, supported by artillery. On the evening of 18 February a German attempt to seize the pass by coup de main failed. A more methodical assault on 19 February seized commanding terrain on the left flank of the US forces. By early morning of 20 February commanding terrain on both flanks was in German hands, and the US forces withdrew in disorder.

**Significance.** Although forced to withdraw, US forces delayed the Germans long enough to allow II Corps reserves to occupy strong positions to the northwest. The depleted German forces were unable to penetrate these positions and withdrew on 22 February.

```
Engagement #:    R 2     Battle: Rapido North I

War: World War II
Location: Italy
Century: 20
Year: 1944
Start Date:    1/20/44
End Date:      1/20/44

Campaign: Cassino

Attacker: US 141st RCT 9+), 36th ID
Defender: Ger 1st/129th PGR, 15th PGD
Attacker Commander: Col Wyatt
Defender Commander: Gen Rodt

Duration:      1 days
Width of Front:    1 km

Defender Posture: FD
Terrain: FB/M
Weather: WOC
Season:  WT
Air Superiority?: A
Surprise?: N
Surpriser?: -
Level of Surprise: -

Atkr Total Strength:       8000    Atkr Total Losses:         408
Def Total Strength:        2200    Def Total Losses:           13
A/D Total Strength Ratio:  3.64    A/D Total Loss Ratio:    31.38

Atkr Total Armor:            50    Atkr % per Day Losses:     5.1
Def Total Armor:             14    Def % per Day Losses:     0.59
A/D Total Armor Ratio:     0.00

Atkr Light Armor:             0    Atkr Armor Losses:           0
Atkr MBTs:                   50    Def Armor Losses:            0
Def Light Armor:                   Atkr % per Day Armor Loss:   0
Def MBTs:                    14    Def % per Day Armor Loss:    0

Atkr Arty Pcs:              105    Atkr Arty Pcs Lost:
Def Arty Pcs:                42    Def Arty Pcs Lost:
A/D Total Arty Ratio:      0.00    Atkr % per Day Arty Loss:
                                   Def % per Day Arty Loss:

Atkr Air Sorties:             0    Atkr Air Losses:
Def Air Sorties:              0    Def Air Losses:
A/D Total Sorties Ratio:   0.00    Atkr % of Sorties per Day:
                                   Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:   0.00
```

Reference #:   R 2   Battle:Rapido North I

```
                                    A/D
Combat Effectiveness Favored: N
Leadership Favored:           o/-
Training & Experience Favored:C
Morale Favored:               C                 C:  Comparable for both
Logistics Capability:         x/-                   sides
Momentum Favored:             N
Intelligence Favored          o/-               N:  Not a factor for
Technology Favored:           C                     either side
Initiative Favored:           o/-
Force Quality Favored:        N                 x:  Advantage
Reserves Favored:             O/-
Mobility Superiority Favored: C                 o:  Disadvantage
Air Superiority Favored:      N
Force Preponderance Favored:  x/-               X:  Decisive Advantage
Weather Favored:              o/-
Terrain Favored:              O/-               O:  Decisive Disadvantage
Leadership Favored:           o/-
Planning Favored:             O/-               -:  Not a factor for the
Surprise Favored:             N                     indicated side
Maneuver Favored:             o/-
Logistics Favored:            N
Fortifications Favored:       -/X
Depth Favored:                -/X

Atkr Main Attack Type:        F, RivC
Atkr Secondary AttackType:    -
Def Scheme of Defense:        D/O, EE

Attacker Resolution:          P, S, WDL
Defender Resolution:          P
```

Attacker Mission Accomplish-
ment Score:                            2
Defender Mission Accomplish-
ment Score:                            8

Distance Advanced:            0.7 km/day   (+ = Attacker; - = Defender)

Who Won:                      D           (A = Attacker; D = Defender)

**Rapido River North I, 20-21 January 1944 (R)**

The 36th Infantry Division's 141st Infantry Regiment (+) was to make an assault crossing of the Rapido River north of St. Angelo. On the night of 20 January boat parties met effective artillery, mortar, and small arms fire, and portions only of the 1st Battalion were able to cross. These elements were isolated by the loss of their footbridge and were wiped out by a German counterattack on the morning of 21 January.

Engagement #:     R 3     Battle: Rapido North II

War: World War II
Location: Italy
Century: 20
Year: 1944
Start Date:     1/21/44
End Date:       1/21/44

Campaign: Cassino

Attacker: US 141st RCT (+), 36th ID
Defender: Ger 1st/129th PGR, 15th PGD
Attacker Commander: Col Wyatt
Defender Commander: Gen Rodt

Duration:     1 days
Width of Front:     1 km

Defender Posture: FD
Terrain: FB/M
Weather: WOC
Season:  WT
Air Superiority?: A
Surprise?: N
Surpriser?: -
Level of Surprise: -

| | | | |
|---|---|---|---|
| Atkr Total Strength: | 7600 | Atkr Total Losses: | 666 |
| Def Total Strength: | 2200 | Def Total Losses: | 13 |
| A/D Total Strength Ratio: | 3.45 | A/D Total Loss Ratio: | 51.23 |
| | | | |
| Atkr Total Armor: | 50 | Atkr % per Day Losses: | 8.76 |
| Def Total Armor: | 14 | Def % per Day Losses: | 0.59 |
| A/D Total Armor Ratio: | 0.00 | | |
| | | | |
| Atkr Light Armor: | 0 | Atkr Armor Losses: | 0 |
| Atkr MBTs: | 50 | Def Armor Losses: | 0 |
| Def Light Armor: | | Atkr % per Day Armor Loss: | 0 |
| Def MBTs: | 14 | Def % per Day Armor Loss: | 0 |
| | | | |
| Atkr Arty Pcs: | 105 | Atkr Arty Pcs Lost: | |
| Def Arty Pcs: | 42 | Def Arty Pcs Lost: | |
| A/D Total Arty Ratio: | 0.00 | Atkr % per Day Arty Loss: | |
| | | Def % per Day Arty Loss: | |
| | | | |
| Atkr Air Sorties: | 0 | Atkr Air Losses: | |
| Def Air Sorties: | 0 | Def Air Losses: | |
| A/D Total Sorties Ratio: | 0.00 | Atkr % of Sorties per Day: | |
| | | Def % of Sorties per Day: | |
| | | | |
| Atkr Total Cavalry: | | | |
| Def Total Cavalry: | | | |
| A/D Total Cavalry Ratio: | 0.00 | | |

Reference #:   R 3   Battle:Rapido North II

```
                                    A/D
Combat Effectiveness Favored:  N
Leadership Favored:            o/-
Training & Experience Favored:C
Morale Favored:                C              C: Comparable for both
Logistics Capability:          x/-              sides
Momentum Favored:              N
Intelligence Favored           o/-           N: Not a factor for
Technology Favored:            C                either side
Initiative Favored:            o/-
Force Quality Favored:         N             x: Advantage
Reserves Favored:          :   O/-
Mobility Superiority Favored:  C             o: Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   x/-           X: Decisive Advantage
Weather Favored:               o/-
Terrain Favored:               O/-           O: Decisive Disadvantage
Leadership Favored:            o/-
Planning Favored:              O/-           -: Not a factor for the
Surprise Favored:              N                indicated side
Maneuver Favored:              o/-
Logistics Favored:             N
Fortifications Favored:        -/X
Depth Favored:                 -/x

Atkr Main Attack Type:         F, RivC
Atkr Secondary AttackType:     -
Def Scheme of Defense:         D/O, EE

Attacker Resolution:           P, S, WDL
Defender Resolution:           P
```

Attacker Mission Accomplish-
ment Score:                              2
Defender Mission Accomplish-
ment Score:                              8

Distance Advanced:                  1 km/day  (+ = Attacker; - = Defender)

Who Won:                       D              (A = Attacker; D = Defender)

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**Rapido River North II, 21-22 January 1944 (R)**

A second attempted assault crossing of the Rapido River was made on the night of 21 January and was partially successful, with the 2d and 3d battalions, 141st Infantry Regiment, crossing and advancing about 1,000 meters into the German position. However, effective German fire again destroyed the unit's bridges and isolated the battalions that had crossed. The two battalions defended themselves against increasingly strong counterattacks but were overwhelmed on 22 January.

**Significance.** The US attack failed completely with heavy losses. No German reserves were drawn to the area, so the secondary intention of diverting forces from the vicinity of the intended Anzio landings failed as well.

```
Engagement #:    R 4     Battle: Rapido South I

War: World War II
Location: Italy
Century: 20
Year: 1944
Start Date:    1/20/44
End Date:      1/20/44

Campaign: Cassino

Attacker: US 143rd RCT (+), 36th ID
Defender: Ger 3rd/104th PGR, 15th PGD
Attacker Commander: Col Martin
Defender Commander: Gen Rodt

Duration:     1 days
Width of Front:    1 km

Defender Posture: FD
Terrain: FB/M
Weather: WOC
Season:  WT
Air Superiority?: A
Surprise?: N
Surpriser?: -
Level of Surprise: -

Atkr Total Strength:        7700     Atkr Total Losses:          162
Def Total Strength:         1800     Def Total Losses:            13
A/D Total Strength Ratio:   4.28     A/D Total Loss Ratio:      12.46

Atkr Total Armor:             15     Atkr % per Day Losses:      1.58
Def Total Armor:              14     Def % per Day Losses:       0.72
A/D Total Armor Ratio:      0.00

Atkr Light Armor:              0     Atkr Armor Losses:            0
Atkr MBTs:                    15     Def Armor Losses:             0
Def Light Armor:                     Atkr % per Day Armor Loss:    0
Def MBTs:                     14     Def % per Day Armor Loss:     0

Atkr Arty Pcs:               122     Atkr Arty Pcs Lost:
Def Arty Pcs:                 42     Def Arty Pcs Lost:
A/D Total Arty Ratio:       0.00     Atkr % per Day Arty Loss:
                                     Def % per Day Arty Loss:

Atkr Air Sorties:              0     Atkr Air Losses:
Def Air Sorties:               0     Def Air Losses:
A/D Total Sorties Ratio:    0.00     Atkr % of Sorties per Day:
                                     Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:    0.00
```

Reference #:   R 4   Battle:Rapido South I

|                                    | A/D    |                              |
|------------------------------------|--------|------------------------------|
| Combat Effectiveness Favored:      | N      |                              |
| Leadership Favored:                | o/-    |                              |
| Training & Experience Favored:     | C      |                              |
| Morale Favored:                    | C      | C: Comparable for both       |
| Logistics Capability:              | x/-    |    sides                     |
| Momentum Favored:                  | N      |                              |
| Intelligence Favored               | o/-    | N: Not a factor for          |
| Technology Favored:                | C      |    either side               |
| Initiative Favored:                | o/-    |                              |
| Force Quality Favored:             | N      | x: Advantage                 |
| Reserves Favored:                  | O/-    |                              |
| Mobility Superiority Favored:      | C      | o: Disadvantage              |
| Air Superiority Favored:           | N      |                              |
| Force Preponderance Favored:       | x/-    | X: Decisive Advantage        |
| Weather Favored:                   | o/-    |                              |
| Terrain Favored:                   | O/-    | O: Decisive Disadvantage     |
| Leadership Favored:                | o/-    |                              |
| Planning Favored:                  | O/-    | -: Not a factor for the      |
| Surprise Favored:                  | N      |    indicated side            |
| Maneuver Favored:                  | o/-    |                              |
| Logistics Favored:                 | N      |                              |
| Fortifications Favored:            | -/X    |                              |
| Depth Favored:                     | -/x    |                              |

| | |
|---|---|
| Atkr Main Attack Type: | F, RivC |
| Atkr Secondary AttackType: | - |
| Def Scheme of Defense: | D/O, E |

| | |
|---|---|
| Attacker Resolution: | P, S, WD |
| Defender Resolution: | P |

Attacker Mission Accomplish-
ment Score:                                    2
Defender Mission Accomplish-
ment Score:                                    8

Distance Advanced:                  0.5 km/day   (+ = Attacker; - = Defender)

Who Won:                            D            (A = Attacker; D = Defender)

**Rapido River South I, 20-21 January 1944 (R)**

As part of the US 36th Infantry Division's attempt to cross the Rapido River, the 143d Infantry (+) was to make an assault crossing of the river south of St. Angelo.  Elements of the 1st Battalion crossed on the night of 20 January.  Attempts by the 3d Battalion to cross were frustrated by minefields and effective German artillery and mortar fire.  On the morning of 21 January the US troops were withdrawn to their assembly areas, having made little or no progress.

```
Engagement #:     R 5     Battle: Rapido South II

War: World War II
Location: Italy
Century: 20
Year: 1944
Start Date:    1/21/44
End Date:      1/21/44

Campaign: Cassino

Attacker: US 143rd RCT (+), 36th ID
Defender: Ger 3rd/104th PGR, 15th PGD
Attacker Commander: Col Martin
Defender Commander: Gen Rodt

Duration:      1 days
Width of Front:     1 km

Defender Posture: FD
Terrain: FB/M
Weather: WOC
Season:  WT
Air Superiority?: A
Surprise?: N
Surpriser?: -
Level of Surprise: -

Atkr Total Strength:         7538    Atkr Total Losses:          575
Def Total Strength:          1800    Def Total Losses:            13
A/D Total Strength Ratio:    4.19    A/D Total Loss Ratio:     44.23

Atkr Total Armor:              15    Atkr % per Day Losses:     7.63
Def Total Armor:               14    Def % per Day Losses:      0.72
A/D Total Armor Ratio:       0.00

Atkr Light Armor:               0    Atkr Armor Losses:            0
Atkr MBTs:                     15    Def Armor Losses:             0
Def Light Armor:                     Atkr % per Day Armor Loss:    0
Def MBTs:                      14    Def % per Day Armor Loss:     0

Atkr Arty Pcs:                122    Atkr Arty Pcs Lost:
Def Arty Pcs:                  42    Def Arty Pcs Lost:
A/D Total Arty Ratio:        0.00    Atkr % per Day Arty Loss:
                                     Def % per Day Arty Loss:

Atkr Air Sorties:               0    Atkr Air Losses:
Def Air Sorties:                0    Def Air Losses:
A/D Total Sorties Ratio:     0.00    Atkr % of Sorties per Day:
                                     Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:     0.00
```

Reference #:    R 5   Battle:Rapido South II

```
                                  A/D
Combat Effectiveness Favored:  N
Leadership Favored:            o/-
Training & Experience Favored:C
Morale Favored:                C          C: Comparable for both
Logistics Capability:          x/-            sides
Momentum Favored:              N
Intelligence Favored           o/-        N: Not a factor for
Technology Favored:            C              either side
Initiative Favored:            o/-
Force Quality Favored:         N          x: Advantage
Reserves Favored:              O/-
Mobility Superiority Favored:  C          o: Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   x/-        X: Decisive Advantage
Weather Favored:               o/-
Terrain Favored:               O/-        O: Decisive Disadvantage
Leadership Favored:            o/-
Planning Favored:              O/-        -: Not a factor for the
Surprise Favored:              N              indicated side
Maneuver Favored:              o/-
Logistics Favored:             N
Fortifications Favored:        -/X
Depth Favored:                 -/x

Atkr Main Attack Type:         F, RivC
Atkr Secondary AttackType:     -
Def Scheme of Defense:         D/O, E

Attacker Resolution:           P, S, WDL
Defender Resolution:           P
```

Attacker Mission Accomplish-
ment Score:                              2
Defender Mission Accomplish-
ment Score:                              8

Distance Advanced:            0.8 km/day  (+ = Attacker; - = Defender)

Who Won:                      D           (A = Attacker; D = Defender)

**Rapido River South II, 21-22 January 1944 (R)**

A second attempted assault river crossing by the 2d and 3d battalions on the evening of 21 January also failed. The US units crossed the river but were disorganized by heavy mortar and small arms fire. Unable to advance more than 700 meters and under heavy counterattack, the survivors withdrew early on 22 January.

**Significance.** The US attack failed completely with heavy losses. No German reserves were drawn to the area, so the secondary intention of diverting forces from the vicinity of the intended Anzio landings failed as well.

```
Engagement #:    D 28     Battle: Bowling Alley I

War: World War II
Location: Italy
Century: 20
Year: 1944
Start Date:     2/16/44
End Date:       2/19/44

Campaign: Anzio

Attacker: Ger LXXVI Pnz Corps (-)
Defender: US 2nd/157th Inf (+), 45th ID
Attacker Commander: Gen Mackenson
Defender Commander: Col Brown

Duration:      4 days
Width of Front:     2 km

Defender Posture: PD/FD
Terrain: FB/RgB
Weather: DST
Season:  WT
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Substantial

Atkr Total Strength:      14600     Atkr Total Losses:         1129
Def Total Strength:        4500     Def Total Losses:           442
A/D Total Strength Ratio:  3.24     A/D Total Loss Ratio:      2.55

Atkr Total Armor:            40     Atkr % per Day Losses:     1.93
Def Total Armor:             37     Def % per Day Losses:      2.46
A/D Total Armor Ratio:     1.08

Atkr Light Armor:             0     Atkr Armor Losses:           22
Atkr MBTs:                   40     Def Armor Losses:            21
Def Light Armor:              0     Atkr % per Day Armor Loss: 13.8
Def MBTs:                    37     Def % per Day Armor Loss:  14.2

Atkr Arty Pcs:              100     Atkr Arty Pcs Lost:
Def Arty Pcs:               70     Def Arty Pcs Lost:            0
A/D Total Arty Ratio:      1.43     Atkr % per Day Arty Loss:
                                    Def % per Day Arty Loss:      0

Atkr Air Sorties:          100     Atkr Air Losses:
Def Air Sorties:           267     Def Air Losses:
A/D Total Sorties Ratio:   0.37     Atkr % of Sorties per Day:
                                    Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:   0.00
```

Reference #:  D 28  Battle:Bowling Alley I

```
                                    A/D
Combat Effectiveness Favored:  C
Leadership Favored:            C
Training & Experience Favored: C
Morale Favored:                C          C:  Comparable for both
Logistics Capability:          C              sides
Momentum Favored:              x/-
Intelligence Favored           N          N:  Not a factor for
Technology Favored:            C              either side
Initiative Favored:            x/-
Force Quality Favored:         N          x:  Advantage
Reserves Favored:              N
Mobility Superiority Favored:  N          o:  Disadvantage
Air Superiority Favored:       -/x
Force Preponderance Favored:   x/-        X:  Decisive Advantage
Weather Favored:               -/x
Terrain Favored:               N          O:  Decisive Disadvantage
Leadership Favored:            N
Planning Favored:              x/-        -:  Not a factor for the
Surprise Favored:              x/-            indicated side
Maneuver Favored:              x/-
Logistics Favored:             N
Fortifications Favored:        -/x
Depth Favored:                 -/x

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     E(RF)
Def Scheme of Defense:         D

Attacker Resolution:           R, P, S
Defender Resolution:           WD, S

Attacker Mission Accomplish-
ment Score:                          6
Defender Mission Accomplish-
ment Score:                          6

Distance Advanced:             0.75 km/day  (+ = Attacker; - = Defender)

Who Won:                       D            (A = Attacker; D = Defender)
```

**Bowling Alley I, 16-19 February 1944 (D)**

On 22 January 1944 the US VI Corps established a beachhead at Anzio. Although initial resistance was minimal, the Germans reacted rapidly, moved reserves to the area, and blocked expansion of the beachhead. Hitler made the elimination of the beachhead a priority. A decisive attack was to be made when sufficient forces were available. This attack began on 16 February, with the main effort directed at the center of the Allied line, held by the US 45th Infantry Division.

The 157th Infantry, with a single battalion in the line, held the left of the division's position. Initial German assaults on 15 February were repulsed with heavy loss to the attackers. During the night of 16/17 February German armor and infantry moved south on the Rome-Anzio highway, attacked along the highway at the boundary between the 157th Infantry and the 179th Infantry on its right, and succeeded in enveloping the right flank of the 157th. The 157th withdrew to its left and went into a perimeter defense, opening the highway to German movement. Further German attacks on the unit failed, and the German assault ended on 19 February as Allied counterattacks developed strength.

**Significance.** The withdrawal by the 157th Infantry on 17 February exposed the left flank of the neighboring 179th Infantry, which withdrew with heavy losses (see Bowling Alley II). However, the strong defense by the 157th in its new position prevented the Germans from widening their penetration of the 45th Division sector and aided materially in stopping the overall German offensive.

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```
Engagement #:    D59     Battle: Bowling Alley II

War: World War II
Location: Italy
Century: 20
Year: 1944
Start Date:    2/16/44
End Date:      2/17/44

Campaign: Anzio

Attacker: Ger LXXVI Pnz Corps (-)
Defender: US 179th Inf (-)(+), 45th ID
Attacker Commander: Gen Mackenson
Defender Commander: Col Kammerer

Duration:    2 days
Width of Front:  2.4 km

Defender Posture: PD/FD
Terrain: FB
Weather: DST
Season:  WT
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Substantial

Atkr Total Strength:      15736    Atkr Total Losses:        613
Def Total Strength:       5050     Def Total Losses:         750
A/D Total Strength Ratio: 3.12     A/D Total Loss Ratio:     0.82

Atkr Total Armor:         60       Atkr % per Day Losses:    1.95
Def Total Armor:          25       Def % per Day Losses:     7.43
A/D Total Armor Ratio:    2.40

Atkr Light Armor:         0        Atkr Armor Losses:        19
Atkr MBTs:                60       Def Armor Losses:         9
Def Light Armor:          0        Atkr % per Day Armor Loss:  15.8
Def MBTs:                 25       Def % per Day Armor Loss:   18

Atkr Arty Pcs:            100      Atkr Arty Pcs Lost:
Def Arty Pcs:             70       Def Arty Pcs Lost:        0
A/D Total Arty Ratio:     1.43     Atkr % per Day Arty Loss:
                                   Def % per Day Arty Loss:  0

Atkr Air Sorties:         70       Atkr Air Losses:
Def Air Sorties:          165      Def Air Losses:
A/D Total Sorties Ratio:  0.42     Atkr % of Sorties per Day:
                                   Def % of Sorties per Day:

Atk. Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:  0.00
```

Reference #:  D 59   Battle:Bowling Alley II

```
                                   A/D
Combat Effectiveness Favored:   C
Leadership Favored:             C
Training & Experience Favored:  C
Morale Favored:                 C          C: Comparable for both
Logistics Capability:           C             sides
Momentum Favored:               x/-
Intelligence Favored            N          N: Not a factor for
Technology Favored:             C             either side
Initiative Favored:             x/-
Force Quality Favored:          N          x: Advantage
Reserves Favored:               N
Mobility Superiority Favored:   N          o: Disadvantage
Air Superiority Favored:        -/x
Force Preponderance Favored:    x/-        X: Decisive Advantage
Weather Favored:                -/x
Terrain Favored:                N          O: Decisive Disadvantage
Leadership Favored:             N
Planning Favored:               x/-        -: Not a factor for the
Surprise Favored:               x/-           indicated side
Maneuver Favored:               x/-
Logistics Favored:              N
Fortifications Favored:         -/x
Depth Favored:                  -/x

Atkr Main Attack Type:          F
Atkr Secondary AttackType:      E(LF)
Def Scheme of Defense:          D

Attacker Resolution:            R, P, S
Defender Resolution:            WDL, R, S

Attacker Mission Accomplish-
ment Score:                           7
Defender Mission Accomplish-
ment Score:                           6

Distance Advanced:              2 km/day  (+ = Attacker; - = Defender)

Who Won:                        A         (A = Attacker; D = Defender)
```

**Bowling Alley II, 16-17 February 1944 (D)**

The 179th Infantry, with two battalions in line, held the center of the US 45th Infantry Division's sector during the German offensive at Anzio. Strong German attacks on 16 February were repulsed with heavy loss. However, the withdrawal of the 157th Infantry on the 179th's s left, on the morning of 17 February, exposed the regiment to envelopment. The 179th withdrew while in contact with the Germans, and two of its battalions suffered heavy casualties. The regiment was hard-pressed to hold its new line under the continuous enemy pressure. The arrival of division and corps reserves on 18 February allowed the two disorganized battalions of the 179th to pass into reserve to reorganize.

**Significance.** The near destruction of the 179th Infantry created a serious threat to the Allied beachhead. Only by heavy use of air and artillery assets, and by the commitment of reserves, was the situation stabilized.

```
Engagement #:   D 29    Battle: Bowling Alley III

War: World War II
Location: Italy
Century: 20
Year: 1944
Start Date:    2/16/44
End Date:      2/19/44


Campaign: Anzio

Attacker: Ger LXXVI Pnz Corps (-)
Defender: US 180th Inf (-)(+), 45th ID
Attacker Commander: Gen Mackenson
Defender Commander: Col Dulaney


Duration:      4 days
Width of Front:  ..6 km

Defender Posture: PD/FD
Terrain: FB
Weather: DST
Season:  WT
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Substantial


Atkr Total Strength:       10000    Atkr Total Losses:          439
Def Total Strength:         4625    Def Total Losses:           199
A/D Total Strength Ratio:   2.16    A/D Total Loss Ratio:      2.21


Atkr Total Armor:             20    Atkr % per Day Losses:      1.1
Def Total Armor:               7    Def % per Day Losses:      1.08
A/D Total Armor Ratio:      2.86


Atkr Light Armor:              0    Atkr Armor Losses:            0
Atkr MBTs:                    20    Def Armor Losses:             0
Def Light Armor:               0    Atkr % per Day Armor Loss:    0
Def MBTs:                      7    Def % per Day Armor Loss:     0


Atkr Arty Pcs:               100    Atkr Arty Pcs Lost:
Def Arty Pcs:                 70    Def Arty Pcs Lost:            0
A/D Total Arty Ratio:       1.43    Atkr % per Day Arty Loss:
                                    Def % per Day Arty Loss:      0


Atkr Air Sorties:            100    Atkr Air Losses:
Def Air Sorties:             267    Def Air Losses:
A/D Total Sorties Ratio:    0.37    Atkr % of Sorties per Day:
                                    Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:    0.00
```

Reference #:  D 29   Battle:Bowling Alley III

```
                                   A/D
Combat Effectiveness Favored:  C
Leadership Favored:            C
Training & Experience Favored:C
Morale Favored:               C              C:  Comparable for both
Logistics Capability:         C                  sides
Momentum Favored:             x/-
Intelligence Favored          N              N:  Not a factor for
Technology Favored:           C                  either side
Initiative Favored:           x/-
Force Quality Favored:        N              x:  Advantage
Reserves Favored:             N
Mobility Superiority Favored: N              o:  Disadvantage
Air Superiority Favored:      -/x
Force Preponderance Favored:  x/-            X:  Decisive Advantage
Weather Favored:              -/x
Terrain Favored:              N              O:  Decisive Disadvantage
Leadership Favored:           N
Planning Favored:             -/x            -:  Not a factor for the
Surprise Favored:             x/-                indicated side
Maneuver Favored:             x/-
Logistics Favored:            N
Fortifications Favored:       -/x
Depth Favored:                -/x

Atkr Main Attack Type:        F
Atkr Secondary AttackType:    E(LF)
Def Scheme of Defense:        D

Attacker Resolution:          R, S
Defender Resolution:          S

Attacker Mission Accomplish-
ment Score:                             3
Defender Mission Accomplish-
ment Score:                             6

Distance Advanced:            0.2 km/day  (+ = Attacker; - = Defender)

Who Won:                      D           (A = Attacker; D = Defender)
```

**Bowling Alley III, 16-17 February 1944 (D)**

The right of the 45th Division at Anzio was held by the 180th Infantry with two battalions in the line. The German attacks of 16-17 February were repulsed with heavy loss. The collapse of the 179th Infantry on the 180th's left, on 17 February, forced the regiment to refuse its left flank to prevent envelopment from that quarter. This was skilfully done, the companies disengaging under protective fire from supporting artillery. The new position was maintained until the German attack halted on 19 February.

**Significance.** The defense by the 180th Infantry was material in limiting the German penetration of the 45th Division's line. The great skill with which the regiment's left flank battalion withdrew was in marked contrast to the withdrawal of the 179th Infantry, which virtually collapsed.

```
Engagement #:   R 11      Battle: Mortain I

War: World War II
Location: France
Century: 20
Year: 1944
Start Date:    8/07/44
End Date:      8/07/44

Campaign: Normandy

Attacker: Ger Elms 1st SS and 2nd PD
Defender: US 117th Inf (-)(+), 30th ID
Attacker Commander: Gen Luettwitz
Defender Commander: Col Johnson


Duration:      1 days
Width of Front:      2 km

Defender Posture: HD
Terrain: RM
Weather: DST
Season:  ST
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Substantial

Atkr Total Strength:        8150      Atkr Total Losses:          700
Def Total Strength:         3700      Def Total Losses:           400
A/D Total Strength Ratio:   2.20      A/D Total Loss Ratio:       1.75

Atkr Total Armor:             50      Atkr % per Day Losses:      8.59
Def Total Armor:               0      Def % per Day Losses:      10.81
A/D Total Armor Ratio:      0.00

Atkr Light Armor:              0      Atkr Armor Losses:            5
Atkr MBTs:                    50      Def Armor Losses:             0
Def Light Armor:               0      Atkr % per Day Armor Loss:   10
Def MBTs:                      0      Def % per Day Armor Loss:

Atkr Arty Pcs:                18      Atkr Arty Pcs Lost:
Def Arty Pcs:                 34      Def Arty Pcs Lost:
A/D Total Arty Ratio:       0.53      Atkr % per Day Arty Loss:
                                      Def % per Day Arty Loss:

Atkr Air Sorties:             22      Atkr Air Losses:
Def Air Sorties:             100      Def Air Losses:
A/D Total Sorties Ratio:    0.22      Atkr % of Sorties per Day:
                                      Def % of Sorties per Day:
Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:    0.00
```

Reference #:  R 11   Battle:Mortain I

```
                                      A/D
Combat Effectiveness Favored:  N
Leadership Favored:            N
Training & Experience Favored: C
Morale Favored:                C            C:  Comparable for both
Logistics Capability:          -/x              sides
Momentum Favored:              N
Intelligence Favored           N            N:  Not a factor for
Technology Favored:            C                either side
Initiative Favored:            x/-
Force Quality Favored:         N            x:  Advantage
Reserves Favored:              -/x
Mobility Superiority Favored:  N            o:  Disadvantage
Air Superiority Favored:       -/X
Force Preponderance Favored:   x/-          X:  Decisive Advant=ge
Weather Favored:               N
Terrain Favored:               -/x          O:  Decisive Disadvantage
Leadership Favored:            N
Planning Favored:              N            -:  Not a factor for the
Surprise Favored:              x/-              indicated side
Maneuver Favored:              x/-
Logistics Favored:             N
Fortifications Favored:        N
Depth Favored:                 N

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     -
Def Scheme of Defense:         D

Attacker Resolution:           P, R
Defender Resolution:           S

Attacker Mission Accomplish-
ment Score:                            3
Defender Mission Accomplish-
ment Score:                            6

Distance Advanced:            0.8 km/day  (+ = Attacker;  - = Defender)

Who Won:                       D          (A = Attacker; D = Defender)
```

**Mortain I, 7 August 1944 (R)**

The US 30th Infantry Division was to defend the left flank of VII Corps, and prepare to continue its advance to the east and southeast. On the morning of 7 August the German Avranches counterattack struck the US position between Mortain and St. Barthelemy. The 1st and 3d Battalions, 117th Infantry, held the village of St. Barthelemy and the high ground to its west against heavy German attack. The 3d Battalion was forced back some 700 meters, but continued to control the main road Juvigny - St. Barthelemy. The 1st Battalion was penetrated on the evening of 7 August and withdrew west to new defensive positions on the right of the 3d Battalion. These positions were held against repeated assault until elements of the 119th Infantry and CCB/3d Armored Division arrived to stabilize the situation on 8 August.

**Significance.** With the arrival of the reserves the 117th Infantry was able to counterattack, eventually forcing the Germans to withdraw on 12 August. The German attack failed to penetrate the US lines, and, with their armored forces engaged at Mortain, the Germans were unable to prevent the breakout by US forces east into the flank and rear of the German armies in France.

Engagement #:   R 6    Battle: Mortain II

War: World War II
Location: France
Century: 20
Year: 1944
Start Date:    8/07/44
End Date:      8/07/44

Campaign: Normandy

Attacker: Ger Elms 2nd SS PD and 17th SS PGD
Defender: US 120th Inf (-)(+), 30th ID
Attacker Commander: Col Baum
Defender Commander: Col Birks

Duration:      1 days
Width of Front:    3 km

Defender Posture: HD
Terrain: RgM
Weather: DST
Season:  ST
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Substantial

| | | | |
|---|---|---|---|
| Atkr Total Strength: | 8500 | Atkr Total Losses: | 375 |
| Def Total Strength: | 4600 | Def Total Losses: | 600 |
| A/D Total Strength Ratio: | 1.85 | A/D Total Loss Ratio: | 0.63 |
| | | | |
| Atkr Total Armor: | 30 | Atkr % per Day Losses: | 4.41 |
| Def Total Armor: | 8 | Def % per Day Losses: | 13.04 |
| A/D Total Armor Ratio: | 3.75 | | |
| | | | |
| Atkr Light Armor: | 0 | Atkr Armor Losses: | 4 |
| Atkr MBTs: | 30 | Def Armor Losses: | 0 |
| Def Light Armor: | 0 | Atkr % per Day Armor Loss: | 13.3 |
| Def MBTs: | 8 | Def % per Day Armor Loss: | 0 |
| | | | |
| Atkr Arty Pcs: | 24 | Atkr Arty Pcs Lost: | |
| Def Arty Pcs: | 34 | Def Arty Pcs Lost: | |
| A/D Total Arty Ratio: | 0.71 | Atkr % per Day Arty Loss: | |
| | | Def % per Day Arty Loss: | |
| | | | |
| Atkr Air Sorties: | 22 | Atkr Air Losses: | |
| Def Air Sorties: | 100 | Def Air Losses: | |
| A/D Total Sorties Ratio: | 0.22 | Atkr % of Sorties per Day: | |
| | | Def % of Sorties per Day: | |
| Atkr Total Cavalry: | | | |
| Def Total Cavalry: | | | |
| A/D Total Cavalry Ratio: | 0.00 | | |

Reference #:  R 6  Battle:Mortain II

```
                                  A/D
Combat Effectiveness Favored:  N
Leadership Favored:            N
Training & Experience Favored: C
Morale Favored:                C          C:  Comparable for both
Logistics Capability:          -/x            sides
Momentum Favored:              N
Intelligence Favored           N          N:  Not a factor for
Technology Favored:            C              either side
Initiative Favored:            x/-
Force Quality Favored:         N          x:  Advantage
Reserves Favored:              -/x
Mobility Superiority Favored:  N          o:  Disadvantage
Air Superiority Favored:       -/X
Force Preponderance Favored:   x/-        X:  Decisive Advantage
Weather Favored:               N
Terrain Favored:               -/x        O:  Decisive Disadvantage
Leadership Favored:            N
Planning Favored:              N          -:  Not a factor for the
Surprise Favored:              x/-            indicated side
Maneuver Favored:              x/-
Logistics Favored:             N
Fortifications Favored:        N
Depth Favored:                 N

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     -
Def Scheme of Defense:         D

Attacker Resolution:           P, R, S
Defender Resolution:           S
```

Attacker Mission Accomplish-
ment Score:                              4
Defender Mission Accomplish-
ment Score:                              7

Distance Advanced:             4 km/day  (+ = Attacker; - = Defender)

Who Won:                       D         (A = Attacker; D = Defender)

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**Mortain II, 7 August 1944 (R)**

The initial German attacks on the 30th Infantry Division isolated the 2d Battalion, 120th Infantry, on Hill 317 east of Mortain. The 1st Battalion, 120th Infantry, was forced westward, where it was joined in defending Hill 285 by the 2d Battalion, 117th Infantry. Effective artillery fire called down by observers on Hill 317 broke up further German attacks on Hills 285 and 317. Effective artillery fire was also brought to bear on the German attacks on the 117th Infantry (see Mortain I). The situation stabilized with the arrival of elements of the 119th Infantry on 8 August.

**Significance.** With the arrival of reserves, the 120th Infantry was able to counterattack, forcing the Germans to withdraw by 12 August. The German attack failed to penetrate US lines, and with their armored forces engaged at Mortain, the Germans were unable to prevent the breakout by US forces eastward into the flank and rear of the German armies in France.

```
Engagement #:     R 7     Battle: Schmidt I

War: World War II
Location: Germany
Century: 20
Year: 1944
Start Date:    11/02/44
End Date:      11/05/44

Campaign: Siegfried Line

Attacker: US 112th Inf(+), 28th ID
Defender: Ger LXXIV Corps (-)
Attacker Commander: Col Peterson
Defender Commander: Gen Straube

Duration:       4 days
Width of Front:  1.7 km

Defender Posture: PD/FD
Terrain: RM/RgM
Weather: WLT
Season:  FT
Air Superiority?: A
Surprise?: N
Surpriser?: -
Level of Surprise: -

Atkr Total Strength:        6200    Atkr Total Losses:            640
Def Total Strength:         5025    Def Total Losses:             850
A/D Total Strength Ratio:   1.23    A/D Total Loss Ratio:         0.75

Atkr Total Armor:             44    Atkr % per Day Losses:        2.58
Def Total Armor:              60    Def % per Day Losses:         4.23
A/D Total Armor Ratio:      0.73

Atkr Light Armor:              0    Atkr Armor Losses:             21
Atkr MBTs:                    44    Def Armor Losses:              10
Def Light Armor:               0    Atkr % per Day Armor Loss:    11.9
Def MBTs:                     60    Def % per Day Armor Loss:      4.2

Atkr Arty Pcs:                71    Atkr Arty Pcs Lost:             0
Def Arty Pcs:                 38    Def Arty Pcs Lost:
A/D Total Arty Ratio:       1.87    Atkr % per Day Arty Loss:       0
                                    Def % per Day Arty Loss:

Atkr Air Sorties:             72    Atkr Air Losses:                2
Def Air Sorties:               0    Def Air Losses:
A/D Total Sorties Ratio:    0.00    Atkr % of Sorties per Day:     0.7
                                    Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:    0.00
```

Reference #:    R 7    Battle:Schmidt I

```
                                  A/D
Combat Effectiveness Favored:  C
Leadership Favored:            C
Training & Experience Favored: C
Morale Favored:                C              C: Comparable for both
Logistics Capability:          O/-              sides
Momentum Favored:              N
Intelligence Favored           N              N: Not a factor for
Technology Favored:            C                 either side
Initiative Favored:            N
Force Quality Favored:         C              x: Advantage
Reserves Favored:              -/x
Mobility Superiority Favored:  N              o: Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   N              X: Decisive Advantage
Weather Favored:               -/x
Terrain Favored:               -/X            O: Decisive Disadvantage
Leadership Favored:            n
Planning Favored:              o/-            -: Not a factor for the
Surprise Favored:              N                 indicated side
Maneuver Favored:              N
Logistics Favored:             o/-
Fortifications Favored:        -/x
Depth Favored:                 -/x

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     -
Def Scheme of Defense:         D/O, EE

Attacker Resolution:           P, R, WDL
Defender Resolution:           P

Attacker Mission Accomplish-
ment Score:                           4
Defender Mission Accomplish-
ment Score:                           7

Distance Advanced:         0.85 km/day  (+ = Attacker; - = Defender)

Who Won:                   D            (A = Attacker; D = Defender)
```

**Schmidt I, 2-5 November 1944 (R)**

The US 28th Infantry Division was assigned the mission of advancing through the Huertgen Forest to the Roer River. All three regiments of the division were to attack simultaneously along three divergent axes. In the center, the 112th Infantry was successful initially. The village of Vossenack was captured on 2 November. On 3 November the 2d and 3d Battalions continued the advance, seizing Kommerscheidt and Schmidt against little opposition. The Germans counterattacked on 4 November, forcing the 3d Battalion out of Schmidt. The rugged terrain delayed the supporting armor, and US tanks were only able to intervene to aid the 2d Battalion at Kommerscheidt. By 5 November elements of the 2d and 3d Battalions were able, with armor support, to stabilize a defense which held against repeated attacks until 8 November, when the two battalions withdrew.

**Significance.** After initial success the US attack was halted by the rapid German response. The lack of armor support was a critical factor in the collapse of the 3d Battalion. With the exception of Vossenack, none of the objectives captured were held.

```
Engagement #:     R 8      Battle: Schmidt II

War: World War II
Location: Germany
Century: 20
Year: 1944
Start Date:    11/02/44
End Date:      11/03/44

Campaign: Siegfried Line

Attacker: US 110th Inf (+), 28th ID
Defender: Ger LXXIV Corps (-)
Attacker Commander: Col Seely
Defender Commander: Gen Straube

Duration:     2 days
Width of Front:     2 km

Defender Posture: PD/FD
Terrain: RgW
Weather: WLT
Season:  FT
Air Superiority?: A
Surprise?: N
Surpriser?: -
Level of Surprise: -

Atkr Total Strength:        4350    Atkr Total Losses:            163
Def Total Strength:         3450    Def Total Losses:             100
A/D Total Strength Ratio:   1.26    A/D Total Loss Ratio:         1.60

Atkr Total Armor:              0    Atkr % per Day Losses:        1.87
Def Total Armor:               0    Def % per Day Losses:         1.45
A/D Total Armor Ratio:      0.00

Atkr Light Armor:              0    Atkr Armor Losses:              0
Atkr MBTs:                     0    Def Armor Losses:               0
Def Light Armor:               0    Atkr % per Day Armor Loss:      0
Def MBTs:                      0    Def % per Day Armor Loss:       0

Atkr Arty Pcs:                53    Atkr Arty Pcs Lost:             0
Def Arty Pcs:                 38    Def Arty Pcs Lost:
A/D Total Arty Ratio:       1.39    Atkr % per Day Arty Loss:       0
                                    Def % per Day Arty Loss:

Atkr Air Sorties:              0    Atkr Air Losses:
Def Air Sorties:               0    Def Air Losses:
A/D Total Sorties Ratio:    0.00    Atkr % of Sorties per Day:
                                    Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:    0.00
```

Reference #:   R 8   Battle:Schmidt II

```
                                  A/D
Combat Effectiveness Favored:  C
Leadership Favored:            C
Training & Experience Favored:C
Morale Favored:               C                  C:  Comparable for both
Logistics Capability:         C                      sides
Momentum Favored:             N
Intelligence Favored          N                  N:  Not a factor for
Technology Favored:           C                      either side
Initiative Favored:           N
Force Quality Favored:        C                  x:  Advantage
Reserves Favored:             -/x
Mobility Superiority Favored: N                  o:  Disadvantage
Air Superiority Favored:      N
Force Preponderance Favored:  N                  X:  Decisive Advantage
Weather Favored:              -/x
Terrain Favored:              -/X                O:  Decisive Disadvantage
Leadership Favored:           N
Planning Favored:             o/-                -:  Not a factor for the
Surprise Favored:             N                      indicated side
Maneuver Favored:             N
Logistics Favored:            N
Fortifications Favored:       -/X
Depth Favored:                -/x

Atkr Main Attack Type:        F
Atkr Secondary AttackType:    E(RF)
Def Scheme of Defense:        D/O, F

Attacker Resolution:          R, P, S
Defender Resolution:          R
```

Attacker Mission Accomplish-
ment Score:                        3
Defender Mission Accomplish-
ment Score:                        9

Distance Advanced:            0.15 km/day  (+ = Attacker; - = Defender)

Who Won:                      D            (A = Attacker; D = Defender)

**Schmidt II, 2-3 November 1944 (R)**

The second of the three 28th Division attack axes was on the right flank. The attack was made by the 110th Infantry. The 2d and 3d Battalions made repeated but unsuccessful attacks against strong German positions on 2 November. Little ground was gained, and the Germans mounted a minor counterattack, which was repulsed, on the night of 2-3 November. The attack was continued on 3 November, but with little success. On 4 November the two battalions went over to the defense, their new mission being to support by fire a new flanking attack by the 1st Battalion.

**Significance.** The failure of the 110th to advance resulted in the sole divisional reserve, its 1st Battalion, being released to conduct a flank attack, which was ultimately unsuccessful. This reserve was then not available to support the 112th Infantry at Schmidt.

Engagement #:     R 9     Battle: Schmidt III

War: World War II
Location: Germany
Century: 20
Year: 1944
Start Date:    11/02/44
End Date:      11/04/44

Campaign: Siegfried Line

Attacker: US 109th Inf (+), 28th ID
Defender: Ger LXXIV Corps (-)
Attacker Commander: Col Strickler
Defender Commander: Gen Straube

Duration:      3 days
Width of Front:  1.2 km

Defender Posture: PD/FD
Terrain: RW
Weather: WLT
Season:  FT
Air Superiority?: A
Surprise?: N
Surpriser?: -
Level of Surprise: -

| | | | |
|---|---|---|---|
| Atkr Total Strength: | 4950 | Atkr Total Losses: | 350 |
| Def Total Strength: | 3700 | Def Total Losses: | 200 |
| A/D Total Strength Ratio: | 1.34 | A/D Total Loss Ratio: | 1.75 |
| | | | |
| Atkr Total Armor: | 0 | Atkr % per Day Losses: | 2.36 |
| Def Total Armor: | 6 | Def % per Day Losses: | 1.8 |
| A/D Total Armor Ratio: | 0.00 | | |
| | | | |
| Atkr Light Armor: | 0 | Atkr Armor Losses: | 0 |
| Atkr MBTs: | 0 | Def Armor Losses: | 2 |
| Def Light Armor: | 0 | Atkr % per Day Armor Loss: | 0 |
| Def MBTs: | 6 | Def % per Day Armor Loss: | 11.1 |
| | | | |
| Atkr Arty Pcs: | 53 | Atkr Arty Pcs Lost: | 0 |
| Def Arty Pcs: | 38 | Def Arty Pcs Lost: | |
| A/D Total Arty Ratio: | 1.39 | Atkr % per Day Arty Loss: | 0 |
| | | Def % per Day Arty Loss: | |
| | | | |
| Atkr Air Sorties: | 12 | Atkr Air Losses: | |
| Def Air Sorties: | 0 | Def Air Losses: | |
| A/D Total Sorties Ratio: | 0.00 | Atkr % of Sorties per Day: | |
| | | Def % of Sorties per Day: | |
| | | | |
| Atkr Total Cavalry: | | | |
| Def Total Cavalry: | | | |
| A/D Total Cavalry Ratio: | 0.00 | | |

Reference #:    R9   Battle:Schmidt III

```
                                    A/D
Combat Effectiveness Favored:  C
Leadership Favored:            C
Training & Experience Favored: C
Morale Favored:                C          C: Comparable for both
Logistics Capability:          C             sides
Momentum Favored:              N
Intelligence Favored           N          N: Not a factor for
Technology Favored:            C             either side
Initiative Favored:            N
Force Quality Favored:         C          x: Advantage
Reserves Favored:              -/x
Mobility Superiority Favored:  N          o: Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   N          X: Decisive Advantage
Weather Favored:               -/x
Terrain Favored:               -/x        O: Decisive Disadvantage
Leadership Favored:            N
Planning Favored:              o/-        -: Not a factor for the
Surprise Favored:              N             indicated side
Maneuver Favored:              -/x
Logistics Favored:             N
Fortifications Favored:        -/x
Depth Favored:                 -/x

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     -
Def Scheme of Defense:         D/O, F

Attacker Resolution:           P, R
Defender Resolution:           R
```

Attacker Mission Accomplish-
ment Score:                              4
Defender Mission Accomplish-
ment Score:                              6

Distance Advanced:             0.5 km/day  (+ = Attacker; - = Defender)

Who Won:                       D           (A = Attacker; D = Defender)

**Schmidt III, 2-4 November 1944 (R)**

The third 28th Division attack axis was on the left flank. The attack was made by the 109th Infantry. This attack met with some success on 2 November. The 3d Battalion advanced some 500 meters against light resistance before halting for the night. The regiment resumed the attack on 3 November and immediately encountered strong resistance and local counterattacks. On 4 November the attack bogged down completely under heavy artillery, mortar, and small arms fire. German infiltration into the flank and rear of the 109th, along with strong counterattacks, forced the regiment over to the defense, which was maintained until the 12th Infantry relieved the 109th on 6 November.

**Significance.** The 109th Infantry incurred heavy casualties for little gain. Unable to carry out its mission, the regiment was also unavailable to support the advance of the 112th Infantry -- the only attack that showed some possibility of success.

```
Engagement #:  R 18     Battle: Wahlerscheid

War: World War II
Location: Germany
Century: 20
Year: 1944
Start Date:   12/13/44
End Date:     12/16/44


Campaign: Siegfried Line

Attacker: Us 9th Inf (+), 2nd ID
Defender: Ger LXVII Corps (-)
Attacker Commander: Col Hirschfelder
Defender Commander:


Duration:     4 days
Width of Front:     1 km


Defender Posture: PD/FD
Terrain: RW
Weather: WLC
Season:  WT
Air Superiority?: A
Surprise?: N
Surpriser?: -
Level of Surprise: -

Atkr Total Strength:      8300    Atkr Total Losses:        370
Def Total Strength:       1400    Def Total Losses:         250
A/D Total Strength Ratio: 5.93    A/D Total Loss Ratio:     1.48


Atkr Total Armor:           28    Atkr % per Day Losses:    1.11
Def Total Armor:             0    Def % per Day Losses:     4.46
A/D Total Armor Ratio:    0.00


Atkr Light Armor:            0    Atkr Armor Losses:          0
Atkr MBTs:                  28    Def Armor Losses:           0
Def Light Armor:             0    Atkr % per Day Armor Loss:  0
Def MBTs:                    0    Def % per Day Armor Loss:   0


Atkr Arty Pcs:             124    Atkr Arty Pcs Lost:         0
Def Arty Pcs:               12    Def Arty Pcs Lost:
A/D Total Arty Ratio:    10.33    Atkr % per Day Arty Loss:
                                  Def % per Day Arty Loss:


Atkr Air Sorties:            0    Atkr Air Losses:
Def Air Sorties:             0    Def Air Losses:
A/D Total Sorties Ratio:  0.00    Atkr % of Sorties per Day:
                                  Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:  0.00
```

Reference #:  R 18   Battle:Wahlerscheid

```
                                 A/D
Combat Effectiveness Favored:    C
Leadership Favored:              C
Training & Experience Favored:   x/-
Morale Favored:                  C        C: Comparable for both
Logistics Capability:            C           sides
Momentum Favored:                N
Intelligence Favored             o/-      N: Not a factor for
Technology Favored:              C           either side
Initiative Favored:              x/-
Force Quality Favored:           x/-      x: Advantage
Reserves Favored:                x/-
Mobility Superiority Favored:    C        o: Disadvantage
Air Superiority Favored:         N
Force Preponderance Favored:     x/-      X: Decisive Advantage
Weather Favored:                 -/x
Terrain Favored:                 -/x      O: Decisive Disadvantage
Leadership Favored:              C
Planning Favored·                C        -: Not a factor for the
Surprise Favored:                N           indicated side
Maneuver Favored:                x/-
Logistics Favored:               N
Fortifications Favored:          -/x
Depth Favored:                   -/x

Atkr Main Attack Type:           F
Atkr Secondary AttackType:       -
Def Scheme of Defense:           D

Attacker Resolution:             R, P
Defender Resolution:             WD
```

Attacker Mission Accomplish-
ment Score:                              7
Defender Mission Accomplish-
ment Score:                              4

Distance Advanced:               1.1 km/day   (+ = Attacker; - = Defender)

Who Won:                         A            (A = Attacker; D = Defender)

**Wahlerscheid, 13-16 December 1944 (R)**

The US 2d Infantry Division was to drive northeast from Krinkelt-Rocherath to take the Roer River defenses from the flank and rear in concert with an attack by the 8th Infantry Division from the west.  The German defenses at Wahlerscheid, although weakly held, were well sited and camouflaged.  Initial attacks by the 9th Infantry made little progress and resulted in heavy casualties.  On 15 December a combat patrol finally succeeded in penetrating on a narrow front at a point where the German wire and minefields were not covered by fire.  This penetration was exploited on 16 December, and the German defenses were taken in flank and rear on a 1,000-meter front.  Many prisoners were taken, and the 38th Infantry was alerted to pass through the 9th Infantry and expand the penetration further.

**Significance.**  Although the 2d Division had a local success, the value of the penetration was negated by the opening of the German Ardennes offensive on 16 December.  The offensive forced the division to withdraw south and west to prevent its encirclement in the salient created at Wahlerscheid.

Engagement #:   R 19      Battle: Krinkelt-Rocherath I

War: World War II
Location: Belgium
Century: 20
Year: 1944
Start Date:   12/17/44
End Date:     12/17/44

Campaign: Ardennes

Attacker: Ger 12th SS PnzDiv (-)(+)
Defender: US 3rd/23rd Inf, 2nd ID
Attacker Commander: Col Kraas
Defender Commander: Col Tuttle

Duration:      1 days
Width of Front:  2.5 km

Defender Posture: HD
Terrain: RgW
Weather: WLC
Season:  WT
Air Superiority?: D
Surprise?: N
Surpriser?: -
Level of Surprise: -

| | | | | |
|---|---|---|---|---|
| Atkr Total Strength: | 3300 | Atkr Total Losses: | | 100 |
| Def Total Strength: | 1357 | Def Total Losses: | | 400 |
| A/D Total Strength Ratio: | 2.43 | A/D Total Loss Ratio: | | 0.25 |
| | | | | |
| Atkr Total Armor: | 11 | Atkr % per Day Losses: | | 3.03 |
| Def Total Armor: | 5 | Def % per Day Losses: | | 29.48 |
| A/D Total Armor Ratio: | 2.20 | | | |
| | | | | |
| Atkr Light Armor: | 0 | Atkr Armor Losses: | | 2 |
| Atkr MBTs: | 11 | Def Armor Losses: | | 2 |
| Def Light Armor: | 0 | Atkr % per Day Armor Loss: | | 18.2 |
| Def MBTs: | 5 | Def % per Day Armor Loss: | | 40 |
| | | | | |
| Atkr Arty Pcs: | 36 | Atkr Arty Pcs Lost: | | |
| Def Arty Pcs: | 12 | Def Arty Pcs Lost: | | |
| A/D Total Arty Ratio: | 3.00 | Atkr % per Day Arty Loss: | | |
| | | Def % per Day Arty Loss: | | |
| | | | | |
| Atkr Air Sorties: | 0 | Atkr Air Losses: | | |
| Def Air Sorties: | 0 | Def Air Losses: | | |
| A/D Total Sorties Ratio: | 0.00 | Atkr % of Sorties per Day: | | |
| | | Def % of Sorties per Day: | | |
| | | | | |
| Atkr Total Cavalry: | | | | |
| Def Total Cavalry: | | | | |
| A/D Total Cavalry Ratio: | 0.00 | | | |

Reference #:   R 19   Battle:Krinkelt-Rocherath I

```
                                    A/D
Combat Effectiveness Favored:  C
Leadership Favored:            C
Training & Experience Favored:-/x
Morale Favored:                C            C: Comparable for both
Logistics Capability:          C               sides
Momentum Favored:              x/-
Intelligence Favored           C            N: Not a factor for
Technology Favored:            C               either side
Initiative Favored:            x/-
Force Quality Favored:         C            x: Advantage
Reserves Favored:              x/-
Mobility Superiority Favored:  C            o: Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   x/-          X: Decisive Advantage
Weather Favored:               x/-
Terrain Favored:               -/x          O: Decisive Disadvantage
Leadership Favored:            C
Planning Favored:              C            -: Not a factor for the
Surprise Favored:              N               indicated side
Maneuver Favored:              x/-
Logistics Favored:             -/O
Fortifications Favored:        N
Depth Favored:                 -/o

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     E(LF)
Def Scheme of Defense:         D

Attacker Resolution:           R, P, Ps
Defender Resolution:           WDL

Attacker Mission Accomplish-
ment Score:                            5
Defender Mission Accomplish-
ment Score:                            4

Distance Advanced:             5 km/day  (+ = Attacker; - = Defender)

Who Won:                       A         (A = Attacker; D = Defender)
```

**Krinkelt-Rocherath I, 17 December 1944 (R)**

At the beginning of the German Ardennes offensive (16 December 1944) the US 2d Infantry Division was in a vulnerable position. The bulk of the division, the 9th and 38th Infantry and attached units, was deployed in the Wahlerscheid salient with a single road its only route of withdrawal to the south and west. This route was threatened by heavy pressure that was forcing back the 99th Infantry Division on the 2d Division's right rear. To stabilize the situation the 23d Infantry was committed from 2d Division reserve to counterattack to restore the position of the 99th Division.

The 3/23d Infantry took position east of Krinkelt-Rocherath to cover the withdrawal of elements of the 99th Division on 17 December. The battalion was struck almost immediately by strong German infantry attacks. Although it lacked artillery support and was hampered by poor fields of fire, the 3/23d held out until German armor penetrated the positions of its left flank company. The remnants of the battalion then withdrew to Krinkelt-Rocherath with heavy losses.

**Significance.** The 23d Infantry was unsuccessful in its counterattack mission. However, the stand in the woods east of Krinkelt-Rocherath did succeed in delaying the German advance long enough for the 99th and 2d Divisions to withdraw to new positions at Krinkelt-Rocherath. As a result the 3/23d Infantry played a key role in stopping the northern pincer of the German Ardennes offensive.

```
Engagement #:   R 10      Battle: Krinkelt-Rocherath II

War: World War II
Location: Belgium
Century: 20
Year: 1944
Start Date:   12/17/44
End Date:     12/19/44

Campaign: Ardennes

Attacker: Ger 12th SS PnzDiv (-)(+)
Defender: US 38th Inf (-)(+), 2nd ID
Attacker Commander: Col Kraas
Defender Commander: Col Boos

Duration:      3 days
Width of Front:     3 km

Defender Posture: HD
Terrain: RB/RM
Weather: WLC
Season:  WT
Air Superiority?: D
Surprise?: N
Surpriser?: -
Level of Surprise: -

Atkr Total Strength:       9100      Atkr Total Losses:         900
Def Total Strength:        6600      Def Total Losses:          720
A/D Total Strength Ratio:  1.38      A/D Total Loss Ratio:      1.25

Atkr Total Armor:           121      Atkr % per Day Losses:      3.3
Def Total Armor:             33      Def % per Day Losses:      3.64
A/D Total Armor Ratio:     3.67

Atkr Light Armor:             0      Atkr Armor Losses:          41
Atkr MBTs:                  121      Def Armor Losses:           13
Def Light Armor:              0      Atkr % per Day Armor Loss: 11.3
Def MBTs:                    33      Def % per Day Armor Loss:  13.1

Atkr Arty Pcs:               99      Atkr Arty Pcs Lost:
Def Arty Pcs:                52      Def Arty Pcs Lost:
A/D Total Arty Ratio:      1.90      Atkr % per Day Arty Loss:
                                     Def % per Day Arty Loss:

Atkr Air Sorties:                    Atkr Air Losses:
Def Air Sorties:                     Def Air Losses:
A/D Total Sorties Ratio:   0.00      Atkr % of Sorties per Day:
                                     Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:   0.00
```

Reference #:  R 10   Battle:Krinkelt-Rocherath II

```
                                    A/D
Combat Effectiveness Favored:  C
Leadership Favored:            C
Training & Experience Favored: C
Morale Favored:                C             C: Comparable for both
Logistics Capability:          C                sides
Momentum Favored:              x/-
Intelligence Favored           C             N: Not a factor for
Technology Favored:            C                either side
Initiative Favored:            x/-
Force Quality Favored:         C             x: Advantage
Reserves Favored:              x/-
Mobility Superiority Favored:  x/-           o: Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   x/-           X: Decisive Advantage
Weather Favored:               x/-
Terrain Favored:               -/x           O: Decisive Disadvantage
Leadership Favored:            C
Planning Favored:              o/-           -: Not a factor for the
Surprise Favored:              N                indicated side
Maneuver Favored:              x/-
Logistics Favored:             C
Fortifications Favored:        N
Depth Favored:                 -/x


Atkr Main Attack Type:         F
Atkr Secondary AttackType:     -
Def Scheme of Defense:         D

Attacker Resolution:           P, R, S
Defender Resolution:           WD, S

Attacker Mission Accomplish-
ment Score:                            3
Defender Mission Accomplish-
ment Score:                            7

Distance Advanced:           0.3 km/day  (+ = Attacker; - = Defender)

Who Won:                     D           (A = Attacker; D = Defender)
```

**Krinkelt-Rocherath II, 17-19 December 1944 (R)**

The leading elements of the 3/38th Infantry, 2d Infantry Division, plus attached troops, were withdrawn from the Wahlerscheid salient on the night of 16/17 December to take up defensive positions at Krinkelt-Rocherath. Initial German attacks on 17 December penetrated into the positions at Rocherath but suffered heavy losses. Strong German armored and infantry forces then attempted to seize Krinkelt during the night of 17/18 December, but without success. Additional elements of the 38th Infantry and fragments of other units of the 2d and 99th Divisions arrived to bolster the defense during this period. Combat was at close quarters, and losses were heavy on both sides. The Germans, unable to exploit their superiority in armor in the confines of the village streets, made little progress. Critical to the defense was the concentration of artillery north and west of the villages, with over 11 battalions available to fire in support of the 38th Infantry and attached units. Further German attacks on 19 December were also repulsed. The arrival of the 1st Infantry division to the west allowed the defenders at Krinkelt to withdraw to new positions on Elsenborn Ridge during the night of 19/20 December.

**Significance.** The defense of the villages was critical in stopping the German Ardennes offensive. The losses and delay inflicted on the German spearhead wrecked the timetable for the advance to the Meuse River. Enough time was gained for the arrival of US reinforcements and for the withdrawal of the 2d and 99th Divisions from their exposed positions.

Engagement #: R 15     Battle: Schnee Eifel Center

War: World War II
Location: Germany
Century: 20
Year: 1944
Start Date:   12/16/44
End Date:     12/19/44

Campaign: Ardennes

Attacker: Ger 293rd VGRgt, 18th VGD
Defender: US 423rd Inf, 106th ID
Attacker Commander: Col Hoffman-Schonborn
Defender Commander: Col Cavender

Duration:     4 days
Width of Front:     1 km

Defender Posture: PD/FD
Terrain: RgW/RM
Weather: DOC
Season:  WT
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Complete

| | | | |
|---|---|---|---|
| Atkr Total Strength: | 4100 | Atkr Total Losses: | 200 |
| Def Total Strength: | 3900 | Def Total Losses: | 3700 |
| A/D Total Strength Ratio: | 1.05 | A/D Total Loss Ratio: | 0.05 |
| | | | |
| Atkr Total Armor: | 10 | Atkr % per Day Losses: | 1.22 |
| Def Total Armor: | 0 | Def % per Day Losses: | 23.7 |
| A/D Total Armor Ratio: | 0.00 | | |
| | | | |
| Atkr Light Armor: | 0 | Atkr Armor Losses: | 0 |
| Atkr MBTs: | 10 | Def Armor Losses: | 0 |
| Def Light Armor: | 0 | Atkr % per Day Armor Loss: | 0 |
| Def MBTs: | 0 | Def % per Day Armor Loss: | 0 |
| | | | |
| Atkr Arty Pcs: | 68 | Atkr Arty Pcs Lost: | |
| Def Arty Pcs: | 18 | Def Arty Pcs Lost: | 18 |
| A/D Total Arty Ratio: | 3.78 | Atkr % per Day Arty Loss: | |
| | | Def % per Day Arty Loss: | 25 |
| | | | |
| Atkr Air Sorties: | 0 | Atkr Air Losses: | |
| Def Air Sorties: | 0 | Def Air Losses: | |
| A/D Total Sorties Ratio: | 0.00 | Atkr % of Sorties per Day: | |
| | | Def % of Sorties per Day: | |
| | | | |
| Atkr Total Cavalry: | | | |
| Def Total Cavalry: | | | |
| A/D Total Cavalry Ratio: | 0.00 | | |

Reference #:  R 15   Battle:Schnee Eifel Center

```
                                 A/D
Combat Effectiveness Favored:  N
Leadership Favored:            N
Training & Experience Favored:-/o
Morale Favored:                C              C: Comparable for both
Logistics Capability:          N                 sides
Momentum Favored:              x/-
Intelligence Favored           -/O           N: Not a factor for
Technology Favored:            C                 either side
Initiative Favored:            x/-
Force Quality Favored:         C              x: Advantage
Reserves Favored:              -/O
Mobility Superiority Favored:  C              o: Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   -/x           X: Decisive Advantage
Weather Favored:               x/-
Terrain Favored:               C              O: Decisive Disadvantage
Leadership Favored:            C
Planning Favored:              X/-           -: Not a factor for the
Surprise Favored:              X/-              indicated side
Maneuver Favored:              X/-
Logistics Favored:             -/o
Fortifications Favored:        N
Depth Favored:                 -/O

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     E(RR)
Def Scheme of Defense:         D

Attacker Resolution:           P, R, B
Defender Resolution:           A
```

Attacker Mission Accomplish-
ment Score:                          7
Defender Mission Accomplish-
ment Score:                          2

Distance Advanced:              1 km/day  (+ = Attacker; - = Defender)

Who Won:                       A          (A = Attacker; D = Defender)

**Schnee Eifel Center, 16-19 December 1944 (R)**

The 423d Infantry, 106th Infantry Division, was deployed in defensive positions on the Schnee Eifel on 16 December 1944. It was intended that the division should gain combat experience in a quiet sector of the front. On the morning of 16 December the German Ardennes offensive opened, with elements of the 18th Volks Grenadier Division forcing the provisional battalion of the 423d Infantry (Cannon Company, Antitank Company, and C/820th Tank Destroyer Battalion) out of Bleialf. The 423d then committed elements of Headquarters Company and B/81st Engineers, regaining Bleialf on the evening of 16 December. The regiment was again forced from the village on the morning of 17 December. The German forces moved north to link up at Schoenberg with the right wing of the 18th Volks Grenadier Division, encircling the US forces on the Schnee Eifel. The 423d Infantry attempted to break out on 18-19 December, but failed and was forced to surrender.

**Significance.** The collapse of the Schnee Eifel position led to the largest mass surrender by the US Army in Europe during World War II. The German attack opened a major hole in the VIII Corps line, allowing the Germans to develop their planned penetration to the Meuse River.

```
Engagement #:    D 30      Battle: Schnee Eifel South

War: World War II
Location: Germany
Century: 20
Year: 1944
Start Date:   12/16/44
End Date:     12/16/44


Campaign: Ardennes

Attacker: Ger 62nd VGDiv (+)
Defender: US 424th Inf (+), 106th ID
Attacker Commander: Gen Kittel
Defender Commander: Col Reid


Duration:     1 days
Width of Front:     9 km


Defender Posture: PD/FD
Terrain: RgW
Weather: DOC
Season:  WT
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Complete


Atkr Total Strength:      11000     Atkr Total Losses:         200
Def Total Strength:        4300     Def Total Losses:          300
A/D Total Strength Ratio:  2.56     A/D Total Loss Ratio:      0.67


Atkr Total Armor:            26     Atkr % per Day Losses:     1.8
Def Total Armor:              0     Def % per Day Losses:      3.5
A/D Total Armor Ratio:     0.00


Atkr Light Armor:             0     Atkr Armor Losses:           7
Atkr MBTs:                   26     Def Armor Losses:            0
Def Light Armor:              0     Atkr % per Day Armor Loss: 26.9
Def MBTs:                     0     Def % per Day Armor Loss:    0


Atkr Arty Pcs:               66     Atkr Arty Pcs Lost:
Def Arty Pcs:                59     Def Arty Pcs Lost:
A/D Total Arty Ratio:      1.12     Atkr % per Day Arty Loss:
                                    Def % per Day Arty Loss:


Atkr Air Sorties:             0     Atkr Air Losses:
Def Air Sorties:              0     Def Air Losses:
A/D Total Sorties Ratio:   0.00     Atkr % of Sorties per Day:
                                    Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:   0.00
```

Reference #:  D 30   Battle:Schnee Eifel South

```
                                    A/D
Combat Effectiveness Favored:  N
Leadership Favored:            N
Training & Experience Favored: -/o
Morale Favored:                C              C: Comparable for both
Logistics Capability:          N                 sides
Momentum Favored:              x/-
Intelligence Favored           -/O           N: Not a factor for
Technology Favored:            C                 either side
Initiative Favored:            x/-
Force Quality Favored:         C              x: Advantage
Reserves Favored:              -/x
Mobility Superiority Favored:  C              o: Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   N              X: Decisive Advantage
Weather Favored:               x/-
Terrain Favored:               -/x           O: Decisive Disadvantage
Leadership Favored:            C
Planning Favored:              C              -: Not a factor for the
Surprise Favored:              X/-               indicated side
Maneuver Favored:              N
Logistics Favored:             N
Fortifications Favored:        -/x
Depth Favored:                 -/o

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     E(LF)
Def Scheme of Defense:         D

Attacker Resolution:           P, S
Defender Resolution:           WD, S

Attacker Mission Accomplish-
ment Score:                               6
Defender Mission Accomplish-
ment Score:                               5

Distance Advanced:             2 km/day  (+ = Attacker; - = Defender)

Who Won:                       A         (A = Attacker; D = Defender)
```

**Schnee Eifel South, 16 December 1944 (D)**

Deployed to the south of the 423d Infantry on the Schnee Eifel, the 424th Infantry was to be the only major element of the 106th Division to remain intact during the German Ardennes offensive. The 424th was in good defensive positions, utilizing in part elements of the German Westwall defenses captured by the 28th Division in October 1944. These positions allowed the 424th to stop frontal attacks made by the Germans on 16 December. On the regiment's left flank, however, was a line of outposts manned by the 424th Regimental Cannon Company (fighting as infantry), the Division Cavalry Troop, and B/18th Cavalry Squadron. Much outnumbered, these light forces were forced back to the Our River on 16 December. Their withdrawal threatened the rear of regimental elements remaining to the east of the Our River, which, although reinforced by elements of CCB/9th Armored Division, withdrew on the night of 16 December.

**Significance.** The withdrawal of the 424th Infantry to the west of the Our River increased the isolation of the two regiments of the 106th Division on the Schnee Eifel. The 424th suffered severe losses but withdrew relatively intact and became a needed addition to the defenders of St. Vith.

Engagement #:  D 58      Battle: Schnee Eifel North I

War: World War II
Location: Germany
Century: 20
Year: 1944
Start Date:   12/16/44
End Date:     12/16/44

Campaign: Ardennes

Attacker: Ger 18th VGDiv (-)(+)
Defender: US 14th Cav Grp (+)
Attacker Commander: Col Hoffman-Schonborn
Defender Commander: Col Devine

Duration:      1 days
Width of Front:     6 km

Defender Posture: HD
Terrain: RM
Weather: DOC
Season:  WT
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Complete

| | | | | |
|---|---|---|---|---|
| Atkr Total Strength: | 14300 | Atkr Total Losses: | | 50 |
| Def Total Strength: | 2050 | Def Total Losses: | | 127 |
| A/D Total Strength Ratio: | 6.98 | A/D Total Loss Ratio: | | 0.39 |
| | | | | |
| Atkr Total Armor: | 50 | Atkr % per Day Losses: | | 0.35 |
| Def Total Armor: | 34 | Def % per Day Losses: | | 6.2 |
| A/D Total Armor Ratio: | 1.47 | | | |
| | | | | |
| Atkr Light Armor: | 0 | Atkr Armor Losses: | | 2 |
| Atkr MBTs: | 50 | Def Armor Losses: | | 7 |
| Def Light Armor: | 34 | Atkr % per Day Armor Loss: | | 4 |
| Def MBTs: | 0 | Def % per Day Armor Loss: | | 20.6 |
| | | | | |
| Atkr Arty Pcs: | 160 | Atkr Arty Pcs Lost: | | |
| Def Arty Pcs: | 46 | Def Arty Pcs Lost: | | 2 |
| A/D Total Arty Ratio: | 3.48 | Atkr % per Day Arty Loss: | | |
| | | Def % per Day Arty Loss: | | 4.3 |
| | | | | |
| Atkr Air Sorties: | 0 | Atkr Air Losses: | | |
| Def Air Sorties: | 0 | Def Air Losses: | | |
| A/D Total Sorties Ratio: | 0.00 | Atkr % of Sorties per Day: | | |
| | | Def % of Sorties per Day: | | |
| | | | | |
| Atkr Total Cavalry: | | | | |
| Def Total Cavalry: | | | | |
| A/D Total Cavalry Ratio: | 0.00 | | | |

Reference #:  D 58   Battle:Schnee Eifel North I

```
                                  A/D
Combat Effectiveness Favored:  N
Leadership Favored:            N
Training & Experience Favored:C
Morale Favored:               C          C: Comparable for both
Logistics Capability:         N             sides
Momentum Favored:             x/-
Intelligence Favored          -/O        N: Not a factor for
Technology Favored:           C             either side
Initiative Favored:           x/-
Force Quality Favored:        C          x: Advantage
Reserves Favored:             -/O
Mobility Superiority Favored: -/x        o: Disadvantage
Air Superiority Favored:      N
Force Preponderance Favored:  X/-        X: Decisive Advantage
Weather Favored:              x/-
Terrain Favored:              -/o        O: Decisive Disadvantage
Leadership Favored:           C
Planning Favored:             X/-        -: Not a factor for the
Surprise Favored:             X/-           indicated side
Maneuver Favored:             X/-
Logistics Favored:            N
Fortifications Favored:       N
Depth Favored:                -/O


Atkr Main Attack Type:        F
Atkr Secondary AttackType:    -
Def Scheme of Defense:        D/O, F

Attacker Resolution:          P, B
Defender Resolution:          R, WD

Attacker Mission Accomplish-
ment Score:                            8
Defender Mission Accomplish-
ment Score:                            2

Distance Advanced:             4 km/day  (+ = Attacker; - = Defender)

Who Won:                       A         (A = Attacker; D = Defender)
```

**Schnee Eifel North I, 16 December 1944 (D)**

On 16 December the 14th Cavalry Group manned outposts in the Losheim Gap, on the left flank of the 106th Infantry Division. The outposts covered a front some six kilometers wide, with company-sized strongpoints. These positions were so widely scattered that no coherent, mutually supporting defense was possible. German assault teams were able, in most cases, to infiltrate the positions unobserved. These teams then were able to ambush elements of 14th Cavalry Group that attempted to counterattack. By noon on 16 December the forward elements of 14th Cavalry Group withdrew, where able. By the evening of 16 December the remnants of the 14th Cavalry Group had broken contact with the Germans and were attempting to reorganize in the woods northeast of St. Vith.

**Significance.** The failure of the 14th Cavalry Group to hold the Losheim Gap exposed the left flank of the 106th Division on the Schnee Eifel to envelopment. By failing to remain in contact with the Germans, the 14th Cavalry could not provide the 106th Division the vital information needed to assess the scope and objectives of the German attack.

Engagement #:  D 60     Battle: Schnee Eifel North II

War: World War II
Location: Germany
Century: 20
Year: 1944
Start Date:   12/16/44
End Date:     12/19/44

Campaign: Ardennes

Attacker: Ger 18th VGDiv (-)(+)
Defender: US 422nd Inf (+), 106th ID
Attacker Commander: Col Hoffman-Schonborn
Defender Commander: Col Deschenneux

Duration:     4 days
Width of Front:     1 km

Defender Posture: PD/FD
Terrain: RgW
Weather: DOC
Season:  WT
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Complete

| | | | |
|---|---|---|---|
| Atkr Total Strength: | 12800 | Atkr Total Losses: | 200 |
| Def Total Strength: | 4150 | Def Total Losses: | 3535 |
| A/D Total Strength Ratio: | 3.08 | A/D Total Loss Ratio: | 0.06 |
| | | | |
| Atkr Total Armor: | 120 | Atkr % per Day Losses: | 0.39 |
| Def Total Armor: | 0 | Def % per Day Losses: | 21.3 |
| A/D Total Armor Ratio: | 0.00 | | |
| | | | |
| Atkr Light Armor: | 0 | Atkr Armor Losses: | 2 |
| Atkr MBTs: | 120 | Def Armor Losses: | 0 |
| Def Light Armor: | 0 | Atkr % per Day Armor Loss: | 0.02 |
| Def MBTs: | 0 | Def % per Day Armor Loss: | 0 |
| | | | |
| Atkr Arty Pcs: | 120 | Atkr Arty Pcs Lost: | |
| Def Arty Pcs: | 38 | Def Arty Pcs Lost: | 28 |
| A/D Total Arty Ratio: | 3.16 | Atkr % per Day Arty Loss: | |
| | | Def % per Day Arty Loss: | 18.4 |
| | | | |
| Atkr Air Sorties: | 0 | Atkr Air Losses: | |
| Def Air Sorties: | 0 | Def Air Losses: | |
| A/D Total Sorties Ratio: | 0.00 | Atkr % of Sorties per Day: | |
| | | Def % of Sorties per Day: | |
| | | | |
| Atkr Total Cavalry: | | | |
| Def Total Cavalry: | | | |
| A/D Total Cavalry Ratio: | 0.00 | | |

Reference #: D 60   Battle:Schnee Eifel North II

```
                               A/D
Combat Effectiveness Favored:  N
Leadership Favored:            N
Training & Experience Favored:-/o
Morale Favored:                C        C: Comparable for both
Logistics Capability:          N           sides
Momentum Favored:              x/-
Intelligence Favored           -/O      N: Not a factor for
Technology Favored:            C           either side
Initiative Favored:            x/-
Force Quality Favored:         C        x: Advantage
Reserves Favored:              -/O
Mobility Superiority Favored:  C        o: Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   x/-      X: Decisive Advantage
Weather Favored:               x/-
Terrain Favored:               C        O: Decisive Disadvantage
Leadership Favored:            C
Planning Favored:              X/-      -: Not a factor for the
Surprise Favored:              X/-         indicated side
Maneuver Favored:              X/-
Logistics Favored:             -/o
Fortifications Favored:        N
Depth Favored:                 -/O

Atkr Main Attack Type:         E(LR)
Atkr Secondary AttackType:     -
Def Scheme of Defense:         D

Attacker Resolution:           P, B
Defender Resolution:           A
```

Attacker Mission Accomplish-
ment Score:                              8
Defender Mission Accomplish-
ment Score:                              2

Distance Advanced:             1.5 km/day  (+ = Attacker; - = Defender)

Who Won:                       A           (A = Attacker; D = Defender)

**Schnee Eifel North II, 16-19 December 1944 (D)**

On the morning of 16 December elements of the 18th Volks Grenadier Division, after breaking through the positions of the 14th Cavalry Group (Schnee Eifel North I), enveloped the left rear of the 422d Infantry. The German penetration threatened US artillery positions southwest of Auw. Elements of Headquarters Company and L Company were committed to block the penetration, but were then diverted to meet a threat to the regimental CP at Schlausenbach. With their route unimpeded, the Germans were able to advance to Andler on the Our River and, by morning of 17 December, to capture Schoenberg. The loss of Schoenberg closed the withdrawal route of the 422d Infantry and the adjacent 423d Infantry (Schnee Eifel Center). The trapped regiments prepared to break out on 18 December but were met with heavy fire; they surrendered on 19 December.

**Significance.** The loss of the 422d and 423d Infantry marked the largest mass surrender by the US Army in Europe during World War II. The collapse of the 106th Division and the attached 14th Cavalry Group opened a major hole in the VIII Corps line, allowing the Germans to develop their planned penetration to the Meuse River.

Engagement #:  D 61      Battle: Our River Center

War: World War II
Location: Luxembourg
Century: 20
Year: 1944
Start Date:    12/16/44
End Date:      12/18/44

Campaign: Ardennes

Attacker: Ger XLVII Pnz Corps
Defender: US 110th Inf (-)(+), 28th ID
Attacker Commander: Gen Luettwitz
Defender Commander: Col Fuller

Duration:      3 days
Width of Front:    12 km

Defender Posture: HD/PD
Terrain: RgW
Weather: DOC
Season:  WT
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Complete

| | | | | |
|---|---|---|---|---|
| Atkr Total Strength: | 43800 | Atkr Total Losses: | | 900 |
| Def Total Strength: | 5340 | Def Total Losses: | | 3300 |
| A/D Total Strength Ratio: | 8.20 | A/D Total Loss Ratio: | | 0.27 |
| | | | | |
| Atkr Total Armor: | 212 | Atkr % per Day Losses: | | 0.68 |
| Def Total Armor: | 73 | Def % per Day Losses: | | 20.6 |
| A/D Total Armor Ratio: | 2.90 | | | |
| | | | | |
| Atkr Light Armor: | 0 | Atkr Armor Losses: | | 43 |
| Atkr MBTs: | 212 | Def Armor Losses: | | 59 |
| Def Light Armor: | 18 | Atkr % per Day Armor Loss: | | 6.8 |
| Def MBTs: | 57 | Def % per Day Armor Loss: | | 26.9 |
| | | | | |
| Atkr Arty Pcs: | 325 | Atkr Arty Pcs Lost: | | |
| Def Arty Pcs: | 30 | Def Arty Pcs Lost: | | 2 |
| A/D Total Arty Ratio: | 10.83 | Atkr % per Day Arty Loss: | | |
| | | Def % per Day Arty Loss: | | 2.2 |
| | | | | |
| Atkr Air Sorties: | 0 | Atkr Air Losses: | | |
| Def Air Sorties: | 0 | Def Air Losses: | | |
| A/D Total Sorties Ratio: | 0.00 | Atkr % of Sorties per Day: | | |
| | | Def % of Sorties per Day: | | |
| | | | | |
| Atkr Total Cavalry: | | | | |
| Def Total Cavalry: | | | | |
| A/D Total Cavalry Ratio: | 0.00 | | | |

Reference #:  D 61   Battle:Our River Center

```
                               A/D
Combat Effectiveness Favored: C
Leadership Favored:           C
Training & Experience Favored:C
Morale Favored:               C          C: Comparable for both
Logistics Capability:         C             sides
Momentum Favored:             x/-
Intelligence Favored          -/O        N: Not a factor for
Technology Favored:           C             either side
Initiative Favored:           x/-
Force Quality Favored:        C          x: Advantage
Reserves Favored:             x/-
Mobility Superiority Favored: x/-        o: Disadvantage
Air Superiority Favored:      N
Force Preponderance Favored:  X/-        X: Decisive Advantage
Weather Favored:              x/-
Terrain Favored:              -/x        O: Decisive Disadvantage
Leadership Favored:           C
Planning Favored:             C          -: Not a factor for the
Surprise Favored:             X/-           indicated side
Maneuver Favored:             X/-
Logistics Favored:            N
Fortifications Favored:       N
Depth Favored:                -/O

Atkr Main Attack Type:        F, RivC
Atkr Secondary AttackType:    EE
Def Scheme of Defense:        D

Attacker Resolution:          P
Defender Resolution:          WDL

Attacker Mission Accomplish-
ment Score:                             6
Defender Mission Accomplish-
ment Score:                             5

Distance Advanced:            3.25 km/day  (+ = Attacker; - = Defender)

Who Won:                      A            (A = Attacker; D = Defender)
```

68

## Our River Center, 16-18 December 1944 (D)

The 110th Infantry, 28th Infantry Division, was defending the line of the Our River on 16 December 1944. The regiment had been hard hit in the Huertgen Forest in November, and was absorbing replacements for its losses. The Germans attacked before first light, and before the commencement of their artillery preparation. Assault parties crossed the Our River and infiltrated through the company strongpoints that were dispersed over a 12-kilometer front. With one battalion in division reserve, the 110th Infantry had only two battalions available for the defense. The strongpoints inflicted heavy casualties and delayed the Germans, but were unable to stop the advance. Some units in strongpoints held out until 18 December, while others withdrew to the regimental CP at Wiltz. The defense of Wiltz collapsed on 18 December, and from that point the 110th Infantry existed only in scattered remnants. It was not reconstituted as a regiment until the middle of January.

**Significance.** Given the length of front to be defended, the 110th Infantry was unable to maintain a coherent defense. The hours gained by the tenacious defense of the strongpoints delayed the German attack long enough for the 101st Airborne Division to arrive to defend the critical road junction at Bastogne.

```
Engagement #:   D 62     Battle: Our River North

War: World War II
Location: Luxembourg
Century: 20
Year: 1944
Start Date:   12/16/44
End Date:     12/17/44


Campaign: Ardennes

Attacker: Ger LVIII Pnz Corps
Defender: US 112th Inf (+), 28th ID
Attacker Commander: Gen Krueger
Defender Commander: Col Nelson


Duration:     2 days
Width of Front:     4 km

Defender Posture: HD/PD
Terrain: RgW
Weather: DOC
Season:  WT
Air Superiority?: D
Surprise?: Y
Surpriser?: A
Level of Surprise: Complete


Atkr Total Strength:      16000      Atkr Total Losses:            770
Def Total Strength:        5740      Def Total Losses:             700
A/D Total Strength Ratio:  2.79      A/D Total Loss Ratio:        1.10


Atkr Total Armor:            78      Atkr % per Day Losses:       2.41
Def Total Armor:              4      Def % per Day Losses:         6.1
A/D Total Armor Ratio:    19.50


Atkr Light Armor:             0      Atkr Armor Losses:             20
Atkr MBTs:                   78      Def Armor Losses:               3
Def Light Armor:              0      Atkr % per Day Armor Loss:   12.8
Def MBTs:                     4      Def % per Day Armor Loss:   37..5


Atkr Arty Pcs:              248      Atkr Arty Pcs Lost:
Def Arty Pcs:                59      Def Arty Pcs Lost:              0
A/D Total Arty Ratio:      4.20      Atkr % per Day Arty Loss:
                                     Def % per Day Arty Loss:        0


Atkr Air Sorties:             0      Atkr Air Losses:
Def Air Sorties:              0      Def Air Losses:
A/D Total Sorties Ratio:   0.00      Atkr % of Sorties per Day:
                                     Def % of Sorties per Day:

Atkr Total Cavalry:
Def Total Cavalry:
A/D Total Cavalry Ratio:   0.00
```

```
Reference #:  D 62  Battle:Our River North

                                 A/D
Combat Effectiveness Favored:  C
Leadership Favored:            C
Training & Experience Favored:C
Morale Favored:                C              C: Comparable for both
Logistics Capability:          C                 sides
Momentum Favored:              x/-
Intelligence Favored           -/O           N: Not a factor for
Technology Favored:            C                 either side
Initiative Favored:            x/-
Force Quality Favored:         N             x: Advantage
Reserves Favored:              x/-
Mobility Superiority Favored:  N             o: Disadvantage
Air Superiority Favored:       N
Force Preponderance Favored:   N             X: Decisive Advantage
Weather Favored:               x/-
Terrain Favored:               -/x           O: Decisive Disadvantage
Leadership Favored:            C
Planning Favored:              N             -: Not a factor for the
Surprise Favored:              N                 indicated side
Maneuver Favored:              x/-
Logistics Favored:             N
Fortifications Favored:        N
Depth Favored:                 -/O

Atkr Main Attack Type:         F
Atkr Secondary AttackType:     E(RF)
Def Scheme of Defense:         D

Attacker Resolution:           R, P
Defender Resolution:           WD

Attacker Mission Accomplish-
ment Score:                           6
Defender Mission Accomplish-
ment Score:                           5

Distance Advanced:               2 km/day  (+ = Attacker; - = Defender)

Who Won:                       A           (A = Attacker; D = Defender)
```

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**Our River North, 16-17 December 1944 (D)**

On 16 December the 112th Infantry, 28th Infantry Division, was defending the line of the Our River with two battalions east of the river and one west. The German attack, by elements of the LVIII Panzer Corps, struck the left flank and front of the US position. The 112th Infantry was well prepared, utilizing sections of the captured German Westwall fortifications in its defense. The German attack on the left was stopped, and heavy casualties were inflicted on the attackers. The 424th Infantry (Schnee Eifel South) aided the defense by bringing effective fire on the flank of the German attack. On the right, however, German infantry was able to infiltrate and threaten the 112th's withdrawal route over the Our River. This threat, and a threat to the left flank caused by the withdrawal of the 424th Infantry on 17 December, forced the 112th Infantry to withdraw under heavy pressure on the evening of 17 December.

**Significance.** The 112th Infantry was able to maintain a coherent defense until the threat to its flanks made withdrawal imperative. The delay imposed by the 112th slowed the completion of German bridges over the Our River, preventing full employment of the German armor until 18 December. The US regiment broke contact on 18 December and moved north, where it became a welcome reinforcement to the defense of St. Vith.

## Sources for Data for Newly Researched Engagements

### Archival Sources

The records may be found as follows:

- **RG407** (Record Group 407) may be found at the Washington National Records Center, National Archives and Records Administration (NNMF).

- **T** numbered records are microfilmed German records found at the National Archives, Washington, DC.

- **R** numbered records are German records found at the Bundesarchiv-Militararchiv, Freiburg, FRG.

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T313    Roll 416 Frame 8709617-8709618, 5th Panzer Army, Operations Report, 15 Feb 43

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| | | | historical combat engagements (continued on back) |

19 ABSTRACT (Continue on reverse if necessary and identify by block number)

This report presents information in 96 data fields on 24 World War II combat engagements
in Europe and North Africa in which forced changes in combat posture occurred; 16 are
regimental-level engagements and 8 divisional-level engagements. The data are derived
from official US and German archival sources. Narratives for each engagement, plus a
comprehensive list of sources used, are included.

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83 APR edition may be used until exhausted.
All other editions are obsolete.

18. Continued

Normandy Breakout, WW II,
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